Rong Xu

List of Publications by Year in Descending Order

109 papers	2,828 citations	29 h-index	50 g-index
114 ext. papers	4,368 ext. citations	8.7 avg, IF	6.73 L-index

#	Paper	IF	Citations
109	COVID-19 breakthrough infections, hospitalizations and mortality in fully vaccinated patients with hematologic malignancies: A clarion call for maintaining mitigation and ramping-up research.. *Blood Reviews*, **2022**, 100931	11.1	7
108	Capturing the swelling of solid-electrolyte interphase in lithium metal batteries.. *Science*, **2022**, 375, 66-70	59.3	40
107	Reply to "Post-COVID 19 neurological syndrome: A new risk factor that modifies the prognosis of patients with dementia".. *Alzheimers and Dementia*, **2022**,	1.2	
106	Effects of paired associative magnetic stimulation between nerve root and cortex on motor function of lower limbs after spinal cord injury: study protocol for a randomized controlled trial.. *Neural Regeneration Research*, **2022**, 17, 2459-2464	4.5	0
105	All-Solid-State Lithium-Sulfur Batteries Enhanced by Redox Mediators. *Journal of the American Chemical Society*, **2021**, 143, 18188-18195	16.4	16
104	Risks of SARS-CoV-2 Breakthrough Infection and Hospitalization in Fully Vaccinated Patients With Multiple Myeloma. *JAMA Network Open*, **2021**, 4, e2137575	10.4	6
103	Increased risk for COVID-19 breakthrough infection in fully vaccinated patients with substance use disorders in the United States between December 2020 and August 2021. *World Psychiatry*, **2021**,	14.4	18
102	A Morphologically Stable Li/Electrolyte Interface for All-Solid-State Batteries Enabled by 3D-Micropatterned Garnet. *Advanced Materials*, **2021**, 33, e2104009	24	15
101	Gut-microbiota-microglia-brain interactions in Alzheimer's disease: knowledge-based, multi-dimensional characterization. *Alzheimers Research and Therapy*, **2021**, 13, 177	9	3
100	An iterative approach to detect pleiotropy and perform Mendelian Randomization analysis using GWAS summary statistics. *Bioinformatics*, **2021**, 37, 1390-1400	7.2	8
99	Grooving of Metals by High-Intensity Focused Ultrasound-Assisted Water-Confined Laser Micromachining. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2021**, 143,	3.3	2
98	Predict Alzheimer's disease using hippocampus MRI data: a lightweight 3D deep convolutional network model with visual and global shape representations. *Alzheimers Research and Therapy*, **2021**, 13, 104	9	8
97	Numerical Analysis of stress evolution in thermal barrier coating system during two-stage growth of heterogeneous oxide. *Ceramics International*, **2021**, 47, 14311-14319	5.1	2
96	Molecular subtyping of Alzheimer's disease with consensus non-negative matrix factorization. *PLoS ONE*, **2021**, 16, e0250278	3.7	3
95	Free-standing ultrathin lithium metal–graphene oxide host foils with controllable thickness for lithium batteries. *Nature Energy*, **2021**, 6, 790-798	62.3	56
94	Risk, Racial Disparity, and Outcomes Among Patients With Cancer and COVID-19 Infection-Reply. *JAMA Oncology*, **2021**, 7, 1065-1066	13.4	
93	Increased risk of COVID-19 infection and mortality in people with mental disorders: analysis from electronic health records in the United States. *World Psychiatry*, **2021**, 20, 124-130	14.4	246

92	When hematologic malignancies meet COVID-19 in the United States: Infections, death and disparities. *Blood Reviews*, **2021**, 47, 100775	11.1	31
91	COVID-19 risk and outcomes in patients with substance use disorders: analyses from electronic health records in the United States. *Molecular Psychiatry*, **2021**, 26, 30-39	15.1	200
90	Electrolyte-Resistant Dual Materials for the Synergistic Safety Enhancement of Lithium-Ion Batteries. *Nano Letters*, **2021**, 21, 2074-2080	11.5	12
89	Analyses of Risk, Racial Disparity, and Outcomes Among US Patients With Cancer and COVID-19 Infection. *JAMA Oncology*, **2021**, 7, 220-227	13.4	126
88	Efficient Lithium Metal Cycling over a Wide Range of Pressures from an Anion-Derived Solid-Electrolyte Interphase Framework. *ACS Energy Letters*, **2021**, 6, 816-825	20.1	25
87	COVID-19 and dementia: Analyses of risk, disparity, and outcomes from electronic health records in the US. *Alzheimer's and Dementia*, **2021**, 17, 1297-1306	1.2	68
86	Ultrastrong medium entropy alloy with simultaneous strength-ductility improvement via heterogeneous nanocrystalline structures. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 823, 141631	5.3	6
85	Potential long-term effect of tumor necrosis factor inhibitors on dementia risk: A propensity score matched retrospective cohort study in US veterans. *Alzheimer's and Dementia*, **2021**,	1.2	2
84	COVID-19 risk, disparities and outcomes in patients with chronic liver disease in the United States. *EClinicalMedicine*, **2021**, 31, 100688	11.3	20
83	Relationship Between Smoking and Pressure Injury Risk: A Systematic Review and Meta-Analysis. *Wound Management and Prevention*, **2021**, 67, 34-46	1.1	
82	Dynamic spatial progression of isolated lithium during battery operations.. *Nature*, **2021**, 600, 659-663	50.4	25
81	Predicting cancer origins with a DNA methylation-based deep neural network model. *PLoS ONE*, **2020**, 15, e0226461	3.7	8
80	Automatic extraction, prioritization and analysis of gut microbial metabolites from biomedical literature. *Scientific Reports*, **2020**, 10, 9996	4.9	2
79	Computational Modeling of Heterogeneity of Stress, Charge, and Cyclic Damage in Composite Electrodes of Li-Ion Batteries. *Journal of the Electrochemical Society*, **2020**, 167, 040527	3.9	19
78	Tumor Necrosis Factor (TNF) blocking agents are associated with lower risk for Alzheimer's disease in patients with rheumatoid arthritis and psoriasis. *PLoS ONE*, **2020**, 15, e0229819	3.7	36
77	Microstructure, corrosion behaviour and thermal stability of AA 7150 after ultrasonic shot peening. *Surface and Coatings Technology*, **2020**, 398, 126127	4.4	12
76	Strain rate sensitivity of the ultrastrong gradient nanocrystalline 316L stainless steel and its rate-dependent modeling at nanoscale. *International Journal of Plasticity*, **2020**, 129, 102696	7.6	13
75	DenseCNN: A Densely Connected CNN Model for Alzheimer's Disease Classification Based on Hippocampus MRI Data **2020**, 2020, 1277-1286	0.7	1

74	Charge distribution guided by grain crystallographic orientations in polycrystalline battery materials. *Nature Communications*, **2020**, 11, 83	17.4	75
73	Epigenetic age acceleration and clinical outcomes in gliomas. *PLoS ONE*, **2020**, 15, e0236045	3.7	5
72	Combining phenome-driven drug-target interaction prediction with patients' electronic health records-based clinical corroboration toward drug discovery. *Bioinformatics*, **2020**, 36, i436-i444	7.2	9
71	Air-Filtering Masks for Respiratory Protection from PM and Pandemic Pathogens. *One Earth*, **2020**, 3, 574-589	8.1	22
70	Quantitative spatiotemporal Li profiling using nanoindentation. *Journal of the Mechanics and Physics of Solids*, **2020**, 144, 104102	5	8
69	CoMNRank: An integrated approach to extract and prioritize human microbial metabolites from MEDLINE records. *Journal of Biomedical Informatics*, **2020**, 109, 103524	10.2	2
68	Aldehyde dehydrogenase 2 inhibited oxidized LDL-induced NLRP3 inflammasome priming and activation via attenuating oxidative stress. *Biochemical and Biophysical Research Communications*, **2020**, 529, 998-1004	3.4	4
67	Predicting cancer origins with a DNA methylation-based deep neural network model **2020**, 15, e0226461		
66	Predicting cancer origins with a DNA methylation-based deep neural network model **2020**, 15, e0226461		
65	Predicting cancer origins with a DNA methylation-based deep neural network model **2020**, 15, e0226461		
64	Predicting cancer origins with a DNA methylation-based deep neural network model **2020**, 15, e0226461		
63	Tumor Necrosis Factor (TNF) blocking agents are associated with lower risk for Alzheimer's disease in patients with rheumatoid arthritis and psoriasis **2020**, 15, e0229819		
62	Tumor Necrosis Factor (TNF) blocking agents are associated with lower risk for Alzheimer's disease in patients with rheumatoid arthritis and psoriasis **2020**, 15, e0229819		
61	Tumor Necrosis Factor (TNF) blocking agents are associated with lower risk for Alzheimer's disease in patients with rheumatoid arthritis and psoriasis **2020**, 15, e0229819		
60	Tumor Necrosis Factor (TNF) blocking agents are associated with lower risk for Alzheimer's disease in patients with rheumatoid arthritis and psoriasis **2020**, 15, e0229819		
59	Epigenetic age acceleration and clinical outcomes in gliomas **2020**, 15, e0236045		
58	Epigenetic age acceleration and clinical outcomes in gliomas **2020**, 15, e0236045		
57	Epigenetic age acceleration and clinical outcomes in gliomas **2020**, 15, e0236045		

56	Epigenetic age acceleration and clinical outcomes in gliomas **2020**, 15, e0236045		
55	Analysis of disease organ as a novel phenotype towards disease genetics understanding. *Journal of Biomedical Informatics*, **2019**, 95, 103235	10.2	1
54	Quantification of Heterogeneous Degradation in Li-Ion Batteries. *Advanced Energy Materials*, **2019**, 9, 1900674	21.8	111
53	Heterogeneous damage in Li-ion batteries: Experimental analysis and theoretical modeling. *Journal of the Mechanics and Physics of Solids*, **2019**, 129, 160-183	5	87
52	Modelling and analysis of the oxide growth coupling behaviour of thermal barrier coatings. *Journal of Materials Science*, **2019**, 54, 10270-10283	4.3	3
51	Taming Active Material-Solid Electrolyte Interfaces with Organic Cathode for All-Solid-State Batteries. *Joule*, **2019**, 3, 1349-1359	27.8	47
50	High-Voltage Charging-Induced Strain, Heterogeneity, and Micro-Cracks in Secondary Particles of a Nickel-Rich Layered Cathode Material. *Advanced Functional Materials*, **2019**, 29, 1900247	15.6	132
49	Context-sensitive network analysis identifies food metabolites associated with Alzheimer's disease: an exploratory study. *BMC Medical Genomics*, **2019**, 12, 17	3.7	6
48	Immunotherapy-related adverse events (irAEs): extraction from FDA drug labels and comparative analysis. *JAMIA Open*, **2019**, 2, 173-178	2.9	15
47	The Alzheimer's comorbidity phenome: mining from a large patient database and phenome-driven genetics prediction. *JAMIA Open*, **2019**, 2, 131-138	2.9	5
46	Association of Epigenetic Clock with Consensus Molecular Subtypes and Overall Survival of Colorectal Cancer. *Cancer Epidemiology Biomarkers and Prevention*, **2019**, 28, 1720-1724	4	16
45	Data-driven multiple-level analysis of gut-microbiome-immune-joint interactions in rheumatoid arthritis. *BMC Genomics*, **2019**, 20, 124	4.5	20
44	A Drug-Side Effect Context-Sensitive Network approach for drug target prediction. *Bioinformatics*, **2019**, 35, 2100-2107	7.2	11
43	Long distance chemical gradient induced by surface nanocrystallization. *Applied Materials Today*, **2019**, 14, 137-142	6.6	8
42	A comparison of AA2024 and AA7150 subjected to ultrasonic shot peening: Microstructure, surface segregation and corrosion. *Surface and Coatings Technology*, **2018**, 337, 552-560	4.4	30
41	Composite bending-dominated hollow nanolattices: A stiff, cyclable mechanical metamaterial. *Materials Today*, **2018**, 21, 467-474	21.8	15
40	A systems biology approach to predict and characterize human gut microbial metabolites in colorectal cancer. *Scientific Reports*, **2018**, 8, 6225	4.9	13
39	Oxygen Release Induced Chemomechanical Breakdown of Layered Cathode Materials. *Nano Letters*, **2018**, 18, 3241-3249	11.5	163

38	Transient thermal stress due to the penetration of calcium-magnesium-alumino-silicate in EB-PVD thermal barrier coating system. *Ceramics International*, **2018**, 44, 12655-12663	5.1	19
37	Nanograined surface fabricated on the pure copper by ultrasonic shot peening and an energy-density based criterion for peening intensity quantification. *Journal of Manufacturing Processes*, **2018**, 32, 656-663	5	14
36	Enhanced Mechanical and Biological Performance of an Extremely Fine Nanograined 316L Stainless Steel Cell-Substrate Interface Fabricated by Ultrasonic Shot Peening. *ACS Biomaterials Science and Engineering*, **2018**, 4, 1609-1621	5.5	11
35	Microhole Drilling by Double Laser Pulses With Different Pulse Energies. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2018**, 140,	3.3	5
34	Corrosive fracture of electrodes in Li-ion batteries. *Journal of the Mechanics and Physics of Solids*, **2018**, 121, 258-280	5	49
33	Ultrastrong nanocrystalline stainless steel and its Hall-Petch relationship in the nanoscale. *Scripta Materialia*, **2018**, 155, 26-31	5.6	33
32	Disease comorbidity-guided drug repositioning: a case study in schizophrenia **2018**, 2018, 1300-1309	0.7	7
31	Localized corrosion behaviour of AA7150 after ultrasonic shot peening: Corrosion depth vs. impact energy. *Corrosion Science*, **2018**, 130, 218-230	6.8	46
30	Large-scale mining disease comorbidity relationships from post-market drug adverse events surveillance data. *BMC Bioinformatics*, **2018**, 19, 500	3.6	15
29	An Automated Technique to Construct a Knowledge Base of Traditional Chinese Herbal Medicine for Cancers: An Exploratory Study for Breast Cancer. *Studies in Health Technology and Informatics*, **2018**, 247, 661-665	0.5	1
28	MetabolitePredict: A de novo human metabolomics prediction system and its applications in rheumatoid arthritis. *Journal of Biomedical Informatics*, **2017**, 71, 222-228	10.2	8
27	Ultrasound-assisted water-confined laser micromachining (UWLM) of metals: Experimental study and time-resolved observation. *Journal of Materials Processing Technology*, **2017**, 245, 259-269	5.3	11
26	Mechanical and Structural Degradation of LiNixMnyCozO2Cathode in Li-Ion Batteries: An Experimental Study. *Journal of the Electrochemical Society*, **2017**, 164, A3333-A3341	3.9	75
25	Printing 3D Gel Polymer Electrolyte in Lithium-Ion Microbattery Using Stereolithography. *Journal of the Electrochemical Society*, **2017**, 164, A1852-A1857	3.9	49
24	Operando Nanoindentation: A New Platform to Measure the Mechanical Properties of Electrodes during Electrochemical Reactions. *Journal of the Electrochemical Society*, **2017**, 164, A3840-A3847	3.9	21
23	Interrogating Patient-level Genomics and Mouse Phenomics towards Understanding Cytokines in Colorectal Cancer Metastasis. *AMIA Summits on Translational Science Proceedings*, **2017**, 2017, 227-236	1.1	
22	Drug repositioning for prostate cancer: using a data-driven approach to gain new insights **2017**, 2017, 1724-1733	0.7	1
21	Combining mechanism-based prediction with patient-based profiling for psoriasis metabolomics biomarker discovery **2017**, 2017, 1734-1743	0.7	3

20	Towards understanding brain-gut-microbiome connections in Alzheimer's disease. *BMC Systems Biology*, **2016**, 10 Suppl 3, 63	3.5	92
19	A genomics-based systems approach towards drug repositioning for rheumatoid arthritis. *BMC Genomics*, **2016**, 17 Suppl 7, 518	4.5	12
18	Grid indentation analysis of mechanical properties of composite electrodes in Li-ion batteries. *Extreme Mechanics Letters*, **2016**, 9, 495-502	3.9	61
17	Mechanisms governing the interfacial delamination of thermal barrier coating system with double ceramic layers. *Applied Surface Science*, **2016**, 370, 394-402	6.7	27
16	Effects of sintering and mixed oxide growth on the interface cracking of air-plasma-sprayed thermal barrier coating system at high temperature. *Applied Surface Science*, **2016**, 360, 461-469	6.7	41
15	Mechanical interactions regulated kinetics and morphology of composite electrodes in Li-ion batteries. *Extreme Mechanics Letters*, **2016**, 8, 13-21	3.9	41
14	Ultrafast direct fabrication of flexible substrate-supported designer plasmonic nanoarrays. *Nanoscale*, **2016**, 8, 172-82	7.7	29
13	Explore Small Molecule-induced Genome-wide Transcriptional Profiles for Novel Inflammatory Bowel Disease Drug. *AMIA Summits on Translational Science Proceedings*, **2016**, 2016, 22-31	1.1	6
12	Computational analysis of chemomechanical behaviors of composite electrodes in Li-ion batteries. *Journal of Materials Research*, **2016**, 31, 2715-2727	2.5	48
11	Electrochemomechanics of Electrodes in Li-Ion Batteries: A Review. *Journal of Electrochemical Energy Conversion and Storage*, **2016**, 13,	2	31
10	PhenoPredict: A disease phenome-wide drug repositioning approach towards schizophrenia drug discovery. *Journal of Biomedical Informatics*, **2015**, 56, 348-55	10.2	25
9	Comparative analysis of a novel disease phenotype network based on clinical manifestations. *Journal of Biomedical Informatics*, **2015**, 53, 113-20	10.2	27
8	DenguePredict: An Integrated Drug Repositioning Approach towards Drug Discovery for Dengue **2015**, 2015, 1279-88	0.7	3
7	tcTKB: an integrated cardiovascular toxicity knowledge base for targeted cancer drugs **2015**, 2015, 1342-51	0.7	1
6	Combining Human Disease Genetics and Mouse Model Phenotypes towards Drug Repositioning for Parkinson's disease **2015**, 2015, 1851-60	0.7	14
5	Numerical study on interfacial delamination of thermal barrier coatings with multiple separations. *Surface and Coatings Technology*, **2014**, 244, 117-122	4.4	27
4	Interfacial delamination of double-ceramic-layer thermal barrier coating system. *Ceramics International*, **2014**, 40, 13793-13802	5.1	33
3	Interfacial fracture mechanism associated with mixed oxides growth in thermal barrier coating system. *Surface and Coatings Technology*, **2014**, 253, 139-147	4.4	32

2   Modification of TGF-beta1 signaling pathway during NB4 cells differentiation by all-trans retinoid acid induction. *International Journal of Hematology*, **2009**, 89, 438-444   2.3   5

1   Combining text classification and Hidden Markov Modeling techniques for categorizing sentences in randomized clinical trial abstracts **2006**, 824-8   0.7   14