Tolou Shokuhfar

List of Publications by Year
in descending order

55 papers	1,152 citations	361413 20 h-index	414414 32 g-index
59 all docs	59 docs citations	59 times ranked	1817 citing authors

#	Article	IF	Citations
1	Elevatedâ€Temperature 3D Printing of Hybrid Solidâ€State Electrolyte for Liâ€Ion Batteries. Advanced Materials, 2018, 30, e1800615.	21.0	159
2	Sustained micellar delivery via inducible transitions in nanostructure morphology. Nature Communications, 2018, 9, 624.	12.8	76
3	Fabrication of Anti-Aging TiO2 Nanotubes on Biomedical Ti Alloys. PLoS ONE, 2014, 9, e96213.	2.5	62
4	Revealing nanoscale mineralization pathways of hydroxyapatite using in situ liquid cell transmission electron microscopy. Science Advances, 2020, 6, .	10.3	61
5	The role of electron irradiation history in liquid cell transmission electron microscopy. Science Advances, 2018, 4, eaaq1202.	10.3	47
6	Novel PMMA bone cement nanocomposites containing magnesium phosphate nanosheets and hydroxyapatite nanofibers. Materials Science and Engineering C, 2020, 109, 110497.	7.3	47
7	Thermally oxidized titania nanotubes enhance the corrosion resistance of Ti6Al4V. Materials Science and Engineering C, 2016, 59, 677-689.	7.3	45
8	Ultrafast Synthesis of High Entropy Oxide Nanoparticles by Flame Spray Pyrolysis. Langmuir, 2021, 37, 9059-9068.	3.5	45
9	Precise In Situ Modulation of Local Liquid Chemistry via Electron Irradiation in Nanoreactors Based on Graphene Liquid Cells. Advanced Materials, 2016, 28, 7716-7722.	21.0	44
10	Classification of Hydrogels Based on Their Source: A Review and Application in Stem Cell Regulation. Jom, 2017, 69, 1340-1347.	1.9	40
11	Advances in Grapheneâ€Based Liquid Cell Electron Microscopy: Working Principles, Opportunities, and Challenges. Small Methods, 2019, 3, 1900026.	8.6	38
12	Biophysical evaluation of cells on nanotubular surfaces: the effects of atomic ordering and chemistry. International Journal of Nanomedicine, 2014, 9, 3737.	6.7	34
13	Improved tribocorrosion performance of bio-functionalized TiO2 nanotubes under two-cycle sliding actions in artificial saliva. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 80, 143-154.	3.1	33
14	TEM Studies on Antibacterial Mechanisms of Black Phosphorous Nanosheets . International Journal of Nanomedicine, 2020, Volume 15, 3071-3085.	6.7	28
15	In Situ Study of Molecular Structure of Water and Ice Entrapped in Graphene Nanovessels. ACS Nano, 2019, 13, 4677-4685.	14.6	27
16	Transparent TiO₂ nanotubes on zirconia for biomedical applications. RSC Advances, 2017, 7, 30397-30410.	3.6	24
17	Nanocomposite materials in orthopedic applications. Frontiers of Chemical Science and Engineering, 2019, 13, 1-13.	4.4	23
18	Imaging of soft materials using in situ liquid-cell transmission electron microscopy. Journal of Physics Condensed Matter, 2019, 31, 103001.	1.8	23

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19	In Situ Transmission Electron Microscopy Explores a New Nanoscale Pathway for Direct Gypsum Formation in Aqueous Solution. ACS Applied Nano Materials, 2018, 1, 5430-5440.	5.0	22
20	Hydroxyapatite Fibers: A Review of Synthesis Methods. Jom, 2017, 69, 1354-1360.	1.9	21
21	Protein structural biology using cell-free platform from wheat germ. Advanced Structural and Chemical Imaging, 2018, 4, 13.	4.0	21
22	In-situ porcine corneal matrix hydrogel as ocular surface bandage. Ocular Surface, 2021, 21, 27-36.	4.4	20
23	In Situ Liquidâ€Cell TEM Observation of Multiphase Classical and Nonclassical Nucleation of Calcium Oxalate. Advanced Functional Materials, 2021, 31, 2007736.	14.9	19
24	Facile electrochemical synthesis of antimicrobial TiO2 nanotube arrays. International Journal of Nanomedicine, 2014, 9, 5177.	6.7	18
25	Collagen biomineralization: pathways, mechanisms, and thermodynamics. Emergent Materials, 2021, 4, 1205-1224.	5.7	18
26	Facile hydrothermal synthesis of antibacterial multi-layered hydroxyapatite nanostructures with superior flexibility. CrystEngComm, 2018, 20, 1304-1312.	2.6	15
27	A Review of the Cell to Graphene-Based Nanomaterial Interface. Jom, 2018, 70, 566-574.	1.9	15
28	Considerations for imaging thick, low contrast, and beam sensitive samples with liquid cell transmission electron microscopy. Micron, 2019, 117, 8-15.	2.2	15
29	In situ graphene liquid cell-transmission electron microscopy study of insulin secretion in pancreatic islet cells. International Journal of Nanomedicine, 2019, Volume 14, 371-382.	6.7	13
30	Correlative ex situ and Liquid-Cell TEM Observation of Bacterial Cell Membrane Damage Induced by Rough Surface Topology . International Journal of Nanomedicine, 2020, Volume 15, 1929-1938.	6.7	13
31	Fabrication, Rheological, and Compositional Characterization of Thermoresponsive Hydrogel from Cornea. Tissue Engineering - Part C: Methods, 2021, 27, 307-321.	2.1	12
32	In Situ Visualization of Ferritin Biomineralization via Graphene Liquid Cell-Transmission Electron Microscopy. ACS Biomaterials Science and Engineering, 2020, 6, 3208-3216.	5.2	11
33	Targeted sonodynamic destruction of glioblastoma cells using antibodyâ€“titanium dioxide nanoparticle conjugates. Nanomedicine, 2021, 16, 523-534.	3.3	11
34	Interface Damage in Titanium Dental Implant Due to Tribocorrosion: The Role of Mastication Frequencies. Journal of Bio- and Tribo-Corrosion, 2019, 5, 1.	2.6	9
35	Assessment of Pressure and Density of Confined Water in Graphene Liquid Cells. Advanced Materials Interfaces, 2020, 7, 1901727.	3.7	8
36	In situ visualization of the superior nanomechanical flexibility of individual hydroxyapatite nanobelts. CrystEngComm, 2018, 20, 1031-1036.	2.6	7

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37	Optimization of the Mechanical Properties and the Cytocompatibility for the PMMA Nanocomposites Reinforced with the Hydroxyapatite Nanofibers and the Magnesium Phosphate Nanosheets. Materials, 2021, 14, 5893.	2.9	6
38	TRIP-1 in the extracellular matrix promotes nucleation of calcium phosphate polymorphs. Connective Tissue Research, 2018, 59, 13-19.	2.3	5
39	In vitro Evaluation of Tribocorrosion Induced Failure Mechanisms at the Cellâ€Metal Interface for the Hip Implant Application. Advanced Engineering Materials, 2017, 19, 1600797.	3.5	4
40	Electrochemical anodisation of Tiâ€“15Zr implant: effect of different voltages and times. Surface Innovations, 2017, 5, 82-89.	2.3	3
41	A novel antimicrobial electrochemical glucose biosensor based on silverâ€“Prussian blueâ€modified TiO 2 nanotube arrays. Medical Devices & Sensors, 2020, 3, e10061.	2.7	3
42	Elucidation of Structure and Chemistry of Iron Core in Human Heart Ferritin via Graphene Liquid Cell. Microscopy and Microanalysis, 2016, 22, 800-801.	0.4	1
43	Electron Microscopy and Spectroscopy of Citrate Induced Calcium Oxalate Crystal Structure and Hydration State Changes, and Implications for Kidney Stones. Microscopy and Microanalysis, 2017, 23, 1208-1209.	0.4	1
44	Revealing the Iron Oxides Mineral Core in Ferritin due to the Variations in the H and L Subunits. Microscopy and Microanalysis, 2017, 23, 1184-1185.	0.4	1
45	In situ Encapsulation of E. coli in GLC and Prediction of Beam Induced Death. Microscopy and Microanalysis, 2018, 24, 312-313.	0.4	1
46	Light on the Biomineralization of Ferritin. Microscopy and Microanalysis, 2018, 24, 1324-1325.	0.4	1
47	In situ Liquid Cell Transmission Electron Microscopy Study of Hydroxyapatite Mineralization Process. Microscopy and Microanalysis, 2019, 25, 1502-1502.	0.4	1
48	Synthesis and Characterization of Paramagnetic Iron Nanoparticles with Minimal Gold Coating for Optimal Drug Delivery. Microscopy and Microanalysis, 2016, 22, 1096-1097.	0.4	0
49	Transmission Electron Microscopy Studies of Calcium Phosphate Biomineralization. Microscopy and Microanalysis, 2016, 22, 798-799.	0.4	0
50	Spatially Resolved Electron Energy Loss Spectroscopy Studies in Graphene Liquid Cell for the Investigation of the Biomineralization Processes in Human Body. Microscopy and Microanalysis, 2016, 22, 806-807.	0.4	0
51	Investigation of the Magnetosome Biomineralization in Magnetotactic Bacteria Using GLC-TEM. Microscopy and Microanalysis, 2018, 24, 1330-1331.	0.4	0
52	Unveiling the Mechanism of Liposome Formation Using the Graphene Liquid Cells. Microscopy and Microanalysis, 2018, 24, 1784-1785.	0.4	0
53	In Situ Investigation of Calcium Oxalate Mineralization. Microscopy and Microanalysis, 2018, 24, 1320-1321.	0.4	0
54	Investigation of In Situ Radiation Effects in Liquid Cell Electron Microscopy. Microscopy and Microanalysis, 2018, 24, 1980-1981.	0.4	0

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55	Real-Time Observation of Ferritin Biomineralization Using Graphene Liquid Cells Electron Microscopy. Microscopy and Microanalysis, 2019, 25, 1122-1123.	0.4	0