Majid Minary-Jolandan

List of Publications by Year
in descending order

75 papers	3,278 citations	172457 29 h-index	149698 56 g-index
77 all docs	77 docs citations	77 times ranked	5050 citing authors

#	Article	IF	Citations
1	Processing and 3D printing of SiCN polymerâ€derived ceramics. International Journal of Applied Ceramic Technology, 2022, 19, 939-948.	2.1	7
2	Multiphysics simulation of microscale copper printing by confined electrodeposition using a nozzle array. Journal of Applied Physics, 2022, 131, 055303.	2.5	0
3	Computational analysis of copper electrodeposition into a porous preform. AIP Advances, 2022, 12, .	1.3	2
4	Additive-Free and Support-Free 3D Printing of Thermosetting Polymers with Isotropic Mechanical Properties. ACS Applied Materials & Interfaces, 2021, 13, 5529-5538.	8.0	33
5	Interconnect Fabrication by Electroless Plating on 3D-Printed Electroplated Patterns. ACS Applied Materials & Interfaces, 2021, 13, 19271-19281.	8.0	23
6	Additive printing of pure nanocrystalline nickel thin films using room environment electroplating. Nanotechnology, 2020, 31, 055301.	2.6	13
7	Bioelectronics on Mammalian Collagen. Advanced Electronic Materials, 2020, 6, 2000391.	5.1	8
8	Thermal stability of microscale additively manufactured copper using pulsed electrodeposition. Materials Letters, 2020, 280, 128584.	2.6	12
9	Energy harvesting with peptide nanotubeâ€“graphene oxide flexible substrates prepared with electric field and wettability assisted self-assembly. Journal of Applied Physics, 2020, 128, .	2.5	7
10	Computational Nanomechanics of Noncollagenous Interfibrillar Interface in Bone. ACS Applied Materials & Interfaces, 2020, 12, 25363-25373.	8.0	12
11	Three-Dimensional Printing of Ceramics through â€œCarvingâ€•a Gel and â€œFilling inâ€•the Precursor Polymer. ACS Applied Materials & Interfaces, 2020, 12, 31984-31991.	8.0	25
12	Designing bioinspired brick-and-mortar composites using machine learning and statistical learning. Communications Materials, 2020, 1, .	6.9	17
13	Direct-Write Printing Copperâ€“Nickel (Cu/Ni) Alloy with Controlled Composition from a Single Electrolyte Using Co-Electrodeposition. ACS Applied Materials & Interfaces, 2020, 12, 18683-18691.	8.0	38
14	A microscale additive manufacturing approach for in situ nanomechanics. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 767, 138441.	5.6	15
15	Deformation Mechanisms of â€œTwo-Partâ€•Natural Adhesive in Bone Interfibrillar Nano-Interfaces. ACS Biomaterials Science and Engineering, 2019, 5, 5916-5924.	5.2	6
16	Mechanisms of Localized Pulsed Electrodeposition (L-PED) for Microscale 3D Printing of Nanotwinned Metals. Journal of the Electrochemical Society, 2019, 166, D354-D358.	2.9	11
17	Moisture Sensitive Smart Yarns and Textiles from Selfâ€Balanced Silk Fiber Muscles. Advanced Functional Materials, 2019, 29, 1808241.	14.9	200
18	Enhancement of the Electrical Properties of DNA Molecular Wires through Incorporation of Perylenediimide DNA Base Surrogates. ChemPlusChem, 2019, 84, 416-419.	2.8	3

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19	A Hybrid Process for Printing Pure and High Conductivity Nanocrystalline Copper and Nickel on Flexible Polymeric Substrates. Scientific Reports, 2019, 9, 19032.	3.3	29
20	Aluminaâ€“Nickel Composite Processed via Coâ€Assembly Using Freezeâ€Casting and Spark Plasma Sintering. Advanced Engineering Materials, 2019, 21, 1801103.	3.5	17
21	Low-Cost Manufacturing of Metalâ€“Ceramic Composites through Electrodeposition of Metal into Ceramic Scaffold. ACS Applied Materials & Interfaces, 2019, 11, 4364-4372.	8.0	28
22	Toward Control of Microstructure in Microscale Additive Manufacturing of Copper Using Localized Electrodeposition. Advanced Engineering Materials, 2019, 21, 1800946.	3.5	34
23	Evaluation of the Effect of Thermal Oxidation and Moisture on the Interfacial Shear Strength of Unidirectional IM7/BMI Composite by Fiber Push-in Nanoindentation. Experimental Mechanics, 2018, 58, 111-123.	2.0	9
24	Bioinspired Nacreâ€Like Ceramic with Nickel Inclusions Fabricated by Electroless Plating and Spark Plasma Sintering. Advanced Engineering Materials, 2018, 20, 1700782.	3.5	26
25	Localized Pulsed Electrodeposition Process for Three-Dimensional Printing of Nanotwinned Metallic Nanostructures. Nano Letters, 2018, 18, 208-214.	9.1	68
26	Lowâ€Temperature Deposition of Layered SnSe₂ for Heterojunction Diodes. Advanced Materials Interfaces, 2018, 5, 1800128.	3.7	15
27	Microscale 3D Printing of Nanotwinned Copper. Advanced Materials, 2018, 30, 1705107.	21.0	55
28	Printing of Microscale Nanotwinned Copper Interconnections Using Localized Pulsed Electrodeposition (L-PED). , 2018, , .		1
29	Tensile fatigue behavior of single carbon nanotube yarns. Journal of Materials Science, 2018, 53, 11426-11432.	3.7	10
30	Scalable, hydrophobic and highly-stretchable poly(isocyanurateâ€“urethane) aerogels. RSC Advances, 2018, 8, 21214-21223.	3.6	26
31	Measurement of Temperature-Dependent Youngâ€™s Modulus at a Strain Rate for a Molding Compound by Nanoindentation. Experimental Mechanics, 2017, 57, 1135-1147.	2.0	1
32	Clustering of hydroxyapatite on a super-twisted collagen microfibril under mechanical tension. Journal of Materials Chemistry B, 2017, 5, 2235-2244.	5.8	11
33	Multi-physics simulation of metal printing at micro/nanoscale using meniscus-confined electrodeposition: Effect of environmental humidity. Journal of Applied Physics, 2017, 121, .	2.5	39
34	Lamellar Ceramic Semicrystallineâ€Polymer Composite Fabricated by Freeze Casting. Advanced Engineering Materials, 2017, 19, 1700214.	3.5	8
35	Effect of thermomechanical post-processing on chain orientation and crystallinity of electrospun P(VDF-TrFE) nanofibers. Polymer, 2017, 118, 223-235.	3.8	30
36	Multi-physics simulation of metal printing at micro/nanoscale using meniscus-confined electrodeposition: Effect of nozzle speed and diameter. Journal of Applied Physics, 2017, 121, .	2.5	41

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37	Bioerosion of Synthetic Sling Explants. ACS Biomaterials Science and Engineering, 2017, 3, 2598-2605.	5.2	2
38	Correlation of annealing temperature, morphology, and electro-mechanical properties of electrospun piezoelectric nanofibers. Polymer, 2017, 127, 192-202.	3.8	35
39	Nanofibrous Smart Fabrics from Twisted Yarns of Electrospun Piezopolymer. ACS Applied Materials & Interfaces, 2017, 9, 24220-24229.	8.0	81
40	Bioinspired Multifunctional Ceramic Plateletâ€Reinforced Piezoelectric Polymer Composite. Advanced Engineering Materials, 2017, 19, 1600570.	3.5	11
41	Influence of Lithium Additives in Small Molecule Light-Emitting Electrochemical Cells. ACS Applied Materials & Interfaces, 2016, 8, 16776-16782.	8.0	39
42	Molecular dynamics modeling of a nanomaterials-water surface interaction. Journal of Applied Physics, 2016, 119, 164302.	2.5	2
43	Molecular Mechanism of Polarization and Piezoelectric Effect in Super-Twisted Collagen. ACS Biomaterials Science and Engineering, 2016, 2, 929-936.	5.2	53
44	Growth parameter enhancement for MoS₂ thin films synthesized by pulsed laser deposition. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 848-854.	0.8	9
45	Evolution of electromechanical and morphological properties of piezoelectric thin films with thermomechanical processing. Polymer, 2016, 106, 62-71.	3.8	27
46	Large-Area Deposition of MoS₂ by Pulsed Laser Deposition with In Situ Thickness Control. ACS Nano, 2016, 10, 6054-6061.	14.6	202
47	Thermo-electromechanical Behavior of Piezoelectric Nanofibers. ACS Applied Materials & Interfaces, 2016, 8, 2540-2551.	8.0	73
48	Biocompatible Collagen Films as Substrates for Flexible Implantable Electronics. Advanced Electronic Materials, 2015, 1, 1500154.	5.1	61
49	Flexible Electronics: Biocompatible Collagen Films as Substrates for Flexible Implantable Electronics (Adv. Electron. Mater. 9/2015). Advanced Electronic Materials, 2015, 1, n/a-n/a.	5.1	1
50	High-Performance Coils and Yarns of Polymeric Piezoelectric Nanofibers. ACS Applied Materials & Interfaces, 2015, 7, 5358-5366.	8.0	113
51	Fabrication of MoS₂ thin film transistors via selective-area solution deposition methods. Journal of Materials Chemistry C, 2015, 3, 3842-3847.	5.5	43
52	Controlling the wettability and adhesion of carbon fibers with polymer interfaces via grafted nanofibers. Composites Science and Technology, 2015, 117, 130-138.	7.8	34
53	Alginate-Collagen Fibril Composite Hydrogel. Materials, 2015, 8, 799-814.	2.9	82
54	Dynamics of the nanoneedle probe in trolling mode AFM. Nanotechnology, 2015, 26, 205702.	2.6	18

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55	Solution-based Ag-doped ZnSe thin films with tunable electrical and optical properties. Journal of Materials Chemistry C, 2015, 3, 9781-9788.	5.5	11
56	A simulation study on the significant nanomechanical heterogeneous properties of collagen. Biomechanics and Modeling in Mechanobiology, 2015, 14, 445-457.	2.8	13
57	Nanoindentation ofPseudomonas aeruginosabacterial biofilm using atomic force microscopy. Materials Research Express, 2014, 1, 045411.	1.6	27
58	Microfluidic Parallel Patterning and Cellular Delivery of Molecules with a Nanofountain Probe. Journal of the Association for Laboratory Automation, 2014, 19, 100-109.	2.8	14
59	Nanomechanical imaging of soft samples in liquid using atomic force microscopy. Journal of Applied Physics, 2013, 114, .	2.5	17
60	Nanofountain Probe Electroporation (NFP-E) of Single Cells. Nano Letters, 2013, 13, 2448-2457.	9.1	102
61	Nano/microscale pyroelectric energy harvesting: challenges and opportunities. International Journal of Smart and Nano Materials, 2013, 4, 229-245.	4.2	89
62	Intrinsically high-Qdynamic AFM imaging in liquid with a significantly extended needle tip. Nanotechnology, 2012, 23, 235704.	2.6	32
63	Individual GaN Nanowires Exhibit Strong Piezoelectricity in 3D. Nano Letters, 2012, 12, 970-976.	9.1	125
64	A Review of Mechanical and Electromechanical Properties of Piezoelectric Nanowires. Advanced Materials, 2012, 24, 4656-4675.	21.0	259
65	Mechanical and Electromechanical Characterization of One-Dimensional Piezoelectric Nanomaterials. Nanomedicine and Nanotoxicology, 2012, , 63-91.	0.2	2
66	Diffusion limited current in very high aspect ratio Pt needle electrodes. Applied Physics Letters, 2011, 99, 053113.	3.3	6
67	Strong piezoelectricity in individual GaN nanowires. MRS Communications, 2011, 1, 45-48.	1.8	15
68	Shear piezoelectricity in bone at the nanoscale. Applied Physics Letters, 2010, 97, .	3.3	32
69	Nanoscale characterization of isolated individual type I collagen fibrils: polarization and piezoelectricity. Nanotechnology, 2009, 20, 085706.	2.6	175
70	Nanomechanical Heterogeneity in the Gap and Overlap Regions of Type I Collagen Fibrils with Implications for Bone Heterogeneity. Biomacromolecules, 2009, 10, 2565-2570.	5.4	126
71	Uncovering Nanoscale Electromechanical Heterogeneity in the Subfibrillar Structure of Collagen Fibrils Responsible for the Piezoelectricity of Bone. ACS Nano, 2009, 3, 1859-1863.	14.6	126
72	Hybridizing harmony search algorithm with sequential quadratic programming for engineering optimization problems. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 3080-3091.	6.6	275

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73	An improved in situ measurement of offset phase shift towards quantitative damping-measurement with AFM. Ultramicroscopy, 2008, 108, 821-825.	1.9	4
74	Reversible radial deformation up to the complete flattening of carbon nanotubes in nanoindentation. Journal of Applied Physics, 2008, 103, .	2.5	40
75	Nonlinear Viscoelastic Behavior of Human Knee Ligaments Subjected to Complex Loading Histories. Annals of Biomedical Engineering, 2006, 34, 1008-1018.	2.5	21