

Pawan Tyagi

List of Publications by Year in descending order

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papers

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60
docs citations

60
times ranked

699
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of ferromagnetic electrode length and thickness on Magnetic Tunnel Junction-Based Molecular Spintronic Devices (MTJMSD). <i>Organic Electronics</i> , 2022, 102, 106429.	2.6	8
2	Easy axis anisotropy creating high contrast magnetic zones on magnetic tunnel junctions based molecular spintronics devices (MTJMSD). <i>Scientific Reports</i> , 2022, 12, 5721.	3.3	3
3	Dramatic effect of electrode type on tunnel junction based molecular spintronic devices. <i>Organic Electronics</i> , 2022, 106, 106526.	2.6	2
4	Spatial influence of paramagnetic molecules on magnetic tunnel junction-based molecular spintronic devices (MTJMSD). <i>Chemical Physics Letters</i> , 2022, 800, 139667.	2.6	1
5	Spin state of a single-molecule magnet (SMM) creating long-range ordering on ferromagnetic layers of a magnetic tunnel junction – a Monte Carlo study. <i>RSC Advances</i> , 2021, 11, 32275-32285.	3.6	6
6	Study of Anisotropy on Ferromagnetic Electrodes of a Magnetic Tunnel Junction-Based Molecular Spintronics Device (MTJMSD). , 2021, , .		0
7	The Hysteresis LOOP Studies Of Magnetic Tunnel Junction-based Molecular Spintronics Devices (mtjmsd) Employing Monte Carlo Simulations. , 2021, , .		0
8	Impact of Spin Fluctuation on the magnetic properties of Magnetic Tunnel Junction-Based Molecular Spintronic Device (MTJMSD). , 2021, , .		0
9	Interaction between magnetic molecules and two ferromagnetic electrodes of a magnetic tunnel junction (MTJ). <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 529, 167902.	2.3	7
10	Molecular coupling competing with defects within insulator of the magnetic tunnel junction-based molecular spintronics devices. <i>Scientific Reports</i> , 2021, 11, 17128.	3.3	7
11	Impact of direct exchange coupling via the insulator on the magnetic tunnel junction based molecular spintronics devices with competing molecule induced inter-electrode coupling. <i>AIP Advances</i> , 2021, 11, 015228.	1.3	3
12	Monte Carlo simulation to study the effect of molecular spin state on the spatio-temporal evolution of equilibrium magnetic properties of magnetic tunnel junction based molecular spintronics devices. <i>AIP Advances</i> , 2021, 11, 015340.	1.3	6
13	Roughness Reduction of Additively Manufactured Steel by Electropolishing. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 106, 1337-1344.	3.0	21
14	Exploring room-temperature transport of single-molecule magnet-based molecular spintronics devices using the magnetic tunnel junction as a device platform. <i>RSC Advances</i> , 2020, 10, 13006-13015.	3.6	19
15	Molecular spintronics devices exhibiting properties of a solar cell. <i>Nanotechnology</i> , 2019, 30, 495401.	2.6	17
16	Magnetic force microscopy revealing long range molecule impact on magnetic tunnel junction based molecular spintronics devices. <i>Organic Electronics</i> , 2019, 75, 105421.	2.6	19
17	Reducing surface roughness by chemical polishing of additively manufactured 3D printed 316 stainless steel components. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 100, 2895-2900.	3.0	54
18	Reducing the roughness of internal surface of an additive manufacturing produced 316 steel component by chempolishing and electropolishing. <i>Additive Manufacturing</i> , 2019, 25, 32-38.	3.0	96

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19	Magnetic tunnel junction based molecular spintronics devices exhibiting current suppression at room temperature. <i>Organic Electronics</i> , 2019, 64, 188-194.	2.6	21
20	Large resistance change on magnetic tunnel junction based molecular spintronics devices. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 453, 186-192.	2.3	22
21	Nanoscale Tantalum layer impacting magnetic properties of tunnel junction-based molecular devices. <i>MRS Communications</i> , 2018, 8, 1024-1028.	1.8	4
22	GaAs(100) Surface Passivation with Sulfide and Fluoride Ions. <i>MRS Advances</i> , 2017, 2, 2915-2920.	0.9	1
23	Taguchi Design of Experiment Enabling the Reduction of Spikes on the Sides of Patterned Thin Films for Tunnel Junction Fabrication. <i>MRS Advances</i> , 2017, 2, 3025-3030.	0.9	2
24	Taguchi Design of Experiment for the Optimization of Electrochemical Polishing of Metal Additive Manufacturing Components. , 2016, , .		9
25	Patternable Rough Textured Gold Microwire for Neurochemical Sensing. <i>MRS Advances</i> , 2016, 1, 717-721.	0.9	1
26	Addressing the Challenges of Using Ferromagnetic Electrodes in Molecular Devices. <i>MRS Advances</i> , 2016, 1, 483-488.	0.9	0
27	Monte Carlo and Experimental Magnetic Studies of Molecular Spintronics Devices. <i>Nano</i> , 2015, 10, 1550056.	1.0	5
28	Addressing the challenges of using ferromagnetic electrodes in the magnetic tunnel junction-based molecular spintronics devices. <i>Journal of Nanoparticle Research</i> , 2015, 17, 1.	1.9	17
29	Paramagnetic molecule induced strong antiferromagnetic exchange coupling on a magnetic tunnel junction based molecular spintronics device. <i>Nanotechnology</i> , 2015, 26, 305602.	2.6	30
30	Advantages of Prefabricated Tunnel Junction-Based Molecular Spintronics Devices. <i>Nano</i> , 2015, 10, 1530002.	1.0	16
31	Tunnel junction testbed based molecular devices. , 2014, , .		0
32	A Monte Carlo study of molecular nanostructure based spintronics devices. , 2014, , .		0
33	Molecular Magnet Induced Transformative Effects in Molecular Spintronics Devices: A Monte Carlo Study. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1508, 1.	0.1	1
34	Room Temperature Current Suppression on Magnetic Tunnel Junction Based Molecular Spintronics Devices. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1507, 1.	0.1	0
35	Spin Photovoltaic Effect on Molecule Coupled Ferromagnetic Films of a Magnetic Tunnel Junction. , 2013, , .		0
36	A Monte Carlo Study of Molecular Spintronics Devices. , 2013, , .		1

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37	Molecule Induced Strong Coupling between Ferromagnetic Electrodes of a Molecular Spintronics Device. Materials Science Forum, 2012, 736, 32-54.	0.3	7
38	Dielectrophoretic assembly of ordered nanostructures: Harnessing thermal randomness and inter-particle interactions. , 2012, , .		1
39	Fabrication of tunnel junction-based molecular electronics and spintronics devices. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	11
40	Nanowire-based surface-enhanced Raman spectroscopy (SERS) for chemical warfare simulants. Proceedings of SPIE, 2012, , .	0.8	3
41	Molecular electronics and spintronics devices produced by the plasma oxidation of photolithographically defined metal electrode. Applied Physics A: Materials Science and Processing, 2012, 108, 529-536.	2.3	5
42	Multilayer edge molecular electronics devices: a review. Journal of Materials Chemistry, 2011, 21, 4733.	6.7	60
43	Quantitative analysis of parallel nanowire array assembly by dielectrophoresis. Nanoscale, 2011, 3, 1059-1065.	5.6	25
44	Catalytic Action of Gold and Copper Crystals in the Growth of Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2011, 11, 3609-3615.	0.9	7
45	Ultrathin TaOx film based photovoltaic device. Thin Solid Films, 2011, 519, 2355-2361.	1.8	7
46	Selective lateral ZnO nanowire growth by surface diffusion on nanometer scale "patterned alumina on silicon. Journal of Materials Research, 2011, 26, 2224-2231.	2.6	3
47	Electrochemically grown rough-textured nanowires. Journal of Nanoparticle Research, 2010, 12, 1065-1072.	1.9	4
48	Reversible Actuation of Microstructures by Surface "Chemical Modification of Thin "Film Bilayers. Advanced Materials, 2010, 22, 407-410.	21.0	55
49	Mechanism of ultrathin tunnel barrier failure due to mechanical-stress-induced nanosized hillocks and voids. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2010, 28, 517-521.	1.2	21
50	MOLECULAR SPIN DEVICES: CURRENT UNDERSTANDING AND NEW TERRITORIES. Nano, 2009, 04, 325-338.	1.0	16
51	Patternable Nanowire Sensors for Electrochemical Recording of Dopamine. Analytical Chemistry, 2009, 81, 9979-9984.	6.5	50
52	Self-Assembly Based on Chromium/Copper Bilayers. Journal of Microelectromechanical Systems, 2009, 18, 784-791.	2.5	46
53	Scanning surface-enhanced Raman spectroscopy (SERS) of chemical agent simulants on templated Au-Ag nanowire substrates. , 2009, , .		1
54	Insulator Film Thickness to Fix the Spacing between Electrodes to Molecular Length Scale. , 2007, , .		2

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55	Molecular Electrodes at the Exposed Edge of Metal/Insulator/Metal Trilayer Structures. Journal of the American Chemical Society, 2007, 129, 4929-4938.	13.7	53