Daniel D Wamwangi

List of Publications by Year
in descending order

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53 papers	1,316 citations	567281 15 h-index	345221 36 g-index
54 all docs	54 docs citations	54 times ranked	1648 citing authors

#	Article	IF	Citations
1	The role of vacancies and local distortions in the design of new phase-change materials. Nature Materials, 2007, 6, 122-128.	27.5	426
2	Mechanical stresses upon crystallization in phase change materials. Applied Physics Letters, 2001, 79, 3597-3599.	3.3	150
3	Influence of Bi doping upon the phase change characteristics of Ge2Sb2Te5. Journal of Applied Physics, 2004, 96, 5557-5562.	2.5	92
4	Crystallization kinetics of Ge4Sb1Te5 films. Thin Solid Films, 2002, 408, 310-315.	1.8	72
5	Identification of Te alloys with suitable phase change characteristics. Applied Physics Letters, 2003, 83, 2572-2574.	3.3	71
6	Effect of indium doping on Ge2Sb2Te5 thin films for phase-change optical storage. Applied Physics A: Materials Science and Processing, 2005, 80, 1611-1616.	2.3	71
7	Perovskite solar cells: The new epoch in photovoltaics. Solar Energy, 2020, 196, 295-309.	6.1	53
8	Influence of Sn doping upon the phase change characteristics of Ge2Sb2Te5. Physica Status Solidi A, 2004, 201, 3087-3095.	1.7	41
9	Hollow carbon spheres and a hollow carbon sphere/polyvinylpyrrolidone composite as ammonia sensors. Journal of Materials Chemistry A, 2017, 5, 2539-2549.	10.3	38
10	Improved efficiency of organic solar cells using Au NPs incorporated into PEDOT:PSS buffer layer. AIP Advances, 2017, 7, .	1.3	35
11	Generation of radical species in CVD grown pristine and N-doped solid carbon spheres using H₂ and Ar as carrier gases. RSC Advances, 2017, 7, 21187-21195.	3.6	22
12	Assessment of Se based phase change alloy as a candidate for non-volatile electronic memory applications. Applied Physics A: Materials Science and Processing, 2005, 81, 1601-1605.	2.3	21
13	Phase change materials: From structures to kinetics. Journal of Materials Research, 2007, 22, 2368-2375.	2.6	17
14	Enhancement of organic photovoltaic device performance via P3HT:PCBM solution heat treatment. Thin Solid Films, 2017, 625, 62-69.	1.8	17
15	Correlating Phase Behavior with Photophysical Properties in Mixedâ€Cation Mixedâ€Halide Perovskite Thin Films. Advanced Energy Materials, 2020, 10, 1901350.	19.5	17
16	Annealed silver-islands for enhanced optical absorption in organic solar cell. Thin Solid Films, 2016, 598, 177-183.	1.8	16
17	Plasmonic Ag nanoparticle interlayers for organic photovoltaic cells: An investigation of dielectric properties and light trapping. Solar Energy, 2015, 118, 256-266.	6.1	13
18	Effect of thermal treatment on ZnO:Tb³⁺ nano-crystalline thin films and application for spectral conversion in inverted organic solar cells. RSC Advances, 2018, 8, 29274-29282.	3.6	12

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19	Effect of implantation of Sm+ ions into RF sputtered ZnO thin film. AIP Advances, 2019, 9, .	1.3	10
20	Generation of open-ended, worm-like and graphene-like structures from layered spherical carbon materials. RSC Advances, 2016, 6, 20399-20408.	3.6	8
21	Magnetic properties of aligned iron containing nitrogen-doped multi-walled carbon nanotubes. Materials Chemistry and Physics, 2018, 209, 280-290.	4.0	8
22	Dependence of mobility and charge injection on active layer thickness of bulk heterojunction organic solar cells: PCBM:P3HT. Optical and Quantum Electronics, 2020, 52, 1.	3.3	8
23	Synthesis of Novel Conjugated Linoleic Acid (CLA)-Coated Superparamagnetic Iron Oxide Nanoparticles (SPIONs) for the Delivery of Paclitaxel with Enhanced In Vitro Anti-Proliferative Activity on A549 Lung Cancer Cells. Pharmaceutics, 2022, 14, 829.	4.5	8
24	Structural and spectroscopic analysis of ex-situ annealed RF sputtered aluminium doped zinc oxide thin films. Journal of Applied Physics, 2017, 122, .	2.5	7
25	Surface Brillouin scattering study of tantalum nitride (TaN) thin films. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, C125.	1.5	7
26	Role of oxygen concentrations on structural and optical properties of RF magnetron sputtered ZnO thin films. Optical and Quantum Electronics, 2019, 51, 1.	3.3	6
27	Dark and illuminated J(V) characteristics of thin layered bulk heterojunction P3HT:PCBM sandwich solar cells after thermal treatment. Optical and Quantum Electronics, 2020, 52, 1.	3.3	6
28	Elastic properties and lattice thermal conductivity of amorphous Ge2Sb2Te5 and GeTe thin films. Journal of Applied Physics, 2021, 129, .	2.5	6
29	Identifying Au-based Te alloys for optical data storage. Journal of Applied Physics, 2004, 95, 7567-7572.	2.5	5
30	Optoelectronic and mechanical properties of PVD diamond-like carbon films. Materials Today: Proceedings, 2018, 5, 27307-27315.	1.8	5
31	Elucidating the Trajectory of the Charge Transfer Mechanism and Recombination Process of Hybrid Perovskite Solar Cells. Materials, 2021, 14, 2698.	2.9	5
32	All-digital 3-dimensional profilometry of nano-scaled surfaces with spatial light modulators. Applied Physics B: Lasers and Optics, 2021, 127, 1.	2.2	5
33	Surface Brillouin scattering observation of higher order resonances in annealed, ion-implanted CVD diamond. Diamond and Related Materials, 2017, 76, 171-176.	3.9	4
34	DNA hybridisation sensors for product authentication and tracing: State of the art and challenges. South African Journal of Chemical Engineering, 2019, 27, 16-34.	2.4	4
35	Phase change memory based on SnSe4 alloy. Thin Solid Films, 2013, 527, 323-326.	1.8	3
36	Corrosion performance of pulse plated ruthenium: Dependence on pulse-off time. Surface and Coatings Technology, 2016, 307, 971-977.	4.8	3

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37	Towards Practical Applications of EQCN Experiments to Study Pt Anchor Sites on Carbon Surfaces. Electrocatalysis, 2018, 9, 271-278.	3.0	3
38	Site-selective laser spectroscopy and defect configurations of the Nd3+-Li+ centres in ZnO powders. Journal of Alloys and Compounds, 2020, 817, 153306.	5.5	3
39	The role of oxygen in a carbon source (castor oil versus paraffin oil) in the synthesis of carbon nano-onions. Nanotechnology, 2021, 32, 135603.	2.6	3
40	Enhanced adhesion of anticorrosion ruthenium films deposited by RF sputtering on 304L stainless steel. Surface and Coatings Technology, 2022, 438, 128381.	4.8	3
41	Bias voltage effect on magnetron sputtered titanium aluminum nitride TiAlN thin films properties. EPJ Applied Physics, 2019, 86, 30301.	0.7	2
42	Effect of Gold Nanospheres and Nanodots on the Performance of PEDOT:PSS Solar Cells. Journal of Nanoscience and Nanotechnology, 2019, 19, 2747-2754.	0.9	2
43	The impact of synthesis techniques on the properties of hybrid perovskite materials for photovoltaic application. Materials Express, 2020, 10, 1127-1134.	0.5	2
44	Efficiency enhancement of organic solar cell using surface plasmon resonance effects of Ag nanoparticles. Optical and Quantum Electronics, 2021, 53, 1.	3.3	2
45	The Effect of Sputtered Pt40Pd57Al3 Thin Film Thickness on SO2(aq) Electro-Oxidation. Electrocatalysis, 2019, 10, 399-405.	3.0	1
46	Formation of monodispersed carbon nanospheres by pulsed laser irradiation of HOPG. Materials Chemistry and Physics, 2020, 253, 123269.	4.0	1
47	Tuning structural, electrical and mechanical properties of diamond-like carbon films by substrate bias voltage. Materials Today Communications, 2021, 28, 102501.	1.9	1
48	The effects of the thickness of the sandwiched layer and of the annealing time on induced nanostructures during solid state dewetting of a metal-semiconductor-substrate triple layer structure. Surfaces and Interfaces, 2022, 29, 101783.	3.0	1
49	Cathodic modification of stainless steels with ruthenium: a review of recent advances in making the cheaper option cheaper. Corrosion Reviews, 2018, 36, 495-505.	2.0	0
50	The role of carrier gas on the structural properties of carbon coated GaN. Materials Today Communications, 2021, 27, 102325.	1.9	0
51	Indirect and direct excitation of Nd3+ ions in as-deposited and annealed Nd3+-doped ZnO films. Journal of Luminescence, 2021, 237, 118198.	3.1	0
52	Elastic and magnetic properties of Tb-MnO based thin films. Journal of Magnetism and Magnetic Materials, 2021, 537, 168199.	2.3	0
53	Role of microstructure and stress evolution on the elastic constants of multiferroic oxide-based thin films. , 2019, , .		0