

# Theophillus F Muller

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

520  
citations

623734

14  
h-index

677142

22  
g-index

40  
all docs

40  
docs citations

40  
times ranked

682  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal stability of electron beam evaporated Al <sub>x</sub> O <sub>y</sub> /Pt/Al <sub>x</sub> O <sub>y</sub> multilayer solar absorber coatings. <i>Solar Energy Materials and Solar Cells</i> , 2014, 120, 473-480.	6.2	53
2	Microstructural, optical properties and thermal stability of MgO/Zr/MgO multilayered selective solar absorber coatings. <i>Solar Energy</i> , 2015, 111, 357-363.	6.1	52
3	Characteristics of the mechanical milling on the room temperature ferromagnetism and sensing properties of TiO <sub>2</sub> nanoparticles. <i>Applied Surface Science</i> , 2015, 331, 362-372.	6.1	42
4	Comparative study: the effect of annealing conditions on the properties of P3HT:PCBM blends. <i>Journal of Materials Science</i> , 2013, 48, 1763-1778.	3.7	32
5	Air-Stable Hybrid Perovskite Solar Cell by Sequential Vapor Deposition in a Single Reactor. <i>ACS Applied Energy Materials</i> , 2020, 3, 2350-2359.	5.1	30
6	Femtosecond laser surface structuring and oxidation of chromium thin coatings: Black chromium. <i>Applied Surface Science</i> , 2014, 321, 560-565.	6.1	28
7	Microstructure and phase transformation on milled and unmilled Ti induced by water quenching. <i>Materials Letters</i> , 2014, 132, 157-161.	2.6	27
8	Morphology and structural development of reduced anatase-TiO <sub>2</sub> by pure Ti powder upon annealing and nitridation: Synthesis of TiO <sub>x</sub> and TiO <sub>x</sub> N <sub>y</sub> powders. <i>Materials Characterization</i> , 2015, 100, 41-49.	4.4	26
9	Structural and optical properties of Al <sub>x</sub> O <sub>y</sub> /Pt/Al <sub>x</sub> O <sub>y</sub> multilayer absorber. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2012, 177, 1194-1199.	3.5	25
10	Characterization of silicon nitride thin films deposited by hot-wire CVD at low gas flow rates. <i>Applied Surface Science</i> , 2013, 285, 440-449.	6.1	23
11	Formation of the metastable FCC phase by ball milling and annealing of titanium stearic acid powder. <i>Advanced Powder Technology</i> , 2015, 26, 632-639.	4.1	23
12	Extension of the lifetime of tantalum filaments in the hot-wire (Cat) Chemical Vapor Deposition process. <i>Thin Solid Films</i> , 2008, 516, 822-825.	1.8	21
13	Thermally Induced Nano-Structural and Optical Changes of nc-Si:H Deposited by Hot-Wire CVD. <i>Nanoscale Research Letters</i> , 2009, 4, 307-312.	5.7	18
14	Improved stability of intrinsic nanocrystalline Si thin films deposited by hot-wire chemical vapour deposition technique. <i>Thin Solid Films</i> , 2007, 515, 8040-8044.	1.8	16
15	Mixed-halide perovskites solar cells through PbI <sub>2</sub> and PbCl <sub>2</sub> precursor films by sequential chemical vapor deposition. <i>Solar Energy</i> , 2021, 215, 179-188.	6.1	14
16	The influence of ZnO nanostructures on the structure, optical and photovoltaic properties of organic materials. <i>Thin Solid Films</i> , 2014, 555, 100-106.	1.8	11
17	Filament poisoning at typical carbon nanotube deposition conditions by hot-filament CVD. <i>Journal of Materials Science</i> , 2009, 44, 2610-2616.	3.7	10
18	Crystallization of HWCVD amorphous silicon thin films at elevated temperatures. <i>Thin Solid Films</i> , 2006, 501, 98-101.	1.8	9

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19	Growth kinetics of nc-Si:H deposited at 200°C by hot-wire chemical vapour deposition. <i>Thin Solid Films</i> , 2011, 519, 4437-4441.	1.8	7
20	Production of titanium-tin alloy powder by ball milling: Formation of titanium-tin oxynitride composite powder produced by annealing in air. <i>Journal of Alloys and Compounds</i> , 2015, 622, 824-830.	5.5	7
21	Optical characterisation of a-Si:H and nc-Si:H thin films using the transmission spectrum alone. <i>Journal of Materials Science: Materials in Electronics</i> , 2007, 18, 225-229.	2.2	6
22	Investigation of the growth and local stoichiometric point group symmetry of titania nanotubes during potentiostatic anodization of titanium in phosphate electrolytes. <i>Journal of Physics and Chemistry of Solids</i> , 2015, 85, 278-286.	4.0	6
23	Effect of additional electron acceptor in hybrid P3HT:PCBM:ZnO spin-coated films for photovoltaic application. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 1915-1921.	1.8	5
24	Formation of face-centered cubic and tetragonal titanium oxynitride by low temperature annealing of ball milled titanium powder in air. <i>Advanced Powder Technology</i> , 2015, 26, 169-174.	4.1	4
25	Thermal annealing of protocrystalline a-Si:H. <i>Thin Solid Films</i> , 2011, 519, 4462-4465.	1.8	3
26	Structural and optical characterization of mechanically milled Mg-TiO <sub>2</sub> and nitrated Mg-TiO <sub>2</sub> -N nanostructures: Possible candidates for gas sensing application. <i>Applied Surface Science</i> , 2016, 360, 1047-1058.	6.1	3
27	Adsorption of phosphoric acid anions on platinum (111). <i>Adsorption</i> , 2017, 23, 971-981.	3.0	3
28	Controlled Deposition of Lead Iodide and Lead Chloride Thin Films by Low-Pressure Chemical Vapor Deposition. <i>Coatings</i> , 2020, 10, 1208.	2.6	3
29	Thermal stability of the optical band gap and structural order in hot-wire-deposited amorphous silicon. <i>Journal of Materials Science</i> , 2009, 44, 6333-6337.	3.7	2
30	Employing the effective medium approximation to model the optical properties of crystallized a-Si:H obtained by MIC. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010, 7, NA-NA.	0.8	2
31	Structure-property analysis of the Mg-TiO <sub>2</sub> and Mg-Sn-TiO <sub>2</sub> composites intended for biomedical application. <i>Materials Letters</i> , 2015, 161, 328-331.	2.6	2
32	Effect of HTL thickness on air processed CVD perovskite solar cells. <i>Materials Today: Proceedings</i> , 2021, 36, 303-308.	1.8	2
33	Dual Catalytic Purpose of the Tungsten Filament During the Synthesis of Single-Helix Carbon Microcoils by Hot-Wire CVD. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 5870-5873.	0.9	1
34	Amorphous and nc-Si:H Intrinsic Thin Films for Solar Cells Applications. <i>Materials Science Forum</i> , 0, 657, 191-207.	0.3	1
35	Spectroscopy and structural properties of amorphous and nanocrystalline silicon carbide thin films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2661-2664.	0.8	1
36	Chemical, electronic and nanostructural properties of nanocrystalline silicon synthesised by hot-wire CVD. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 1705-1709.	1.8	1

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37	Oxidation Reduction in Nanocrystalline Silicon Grown by Hydrogen-Profiling Technique. Journal of Nano Research, 2016, 41, 9-17.	0.8	1
38	Investigation of isochronal annealing on the optical properties of HWCVD amorphous silicon nitride deposited at low temperatures and low gas flow rates. Journal of Physics: Conference Series, 2015, 619, 012014.	0.4	0
39	Depth-dependent crystallinity of nano-crystalline silicon induced by step-wise variation of hydrogen dilution during hot-wire CVD. Journal of Physics: Conference Series, 2015, 619, 012002.	0.4	0
40	Degradation of a tantalum filament during the hot-wire CVD of silicon nitride thin films. Thin Solid Films, 2015, 575, 42-46.	1.8	0