Muriel Bouttemy

List of Publications by Year
in descending order

51 papers	689 citations	759055 12 h-index	552653 26 g-index
51 all docs	51 docs citations	51 times ranked	1166 citing authors

#	Article	IF	Citations
1	The influence of relative humidity upon Cu(In,Ga)Se2 thin-film surface chemistry: An X-ray photoelectron spectroscopy study. Applied Surface Science, 2022, 576, 151898.	3.1	8
2	In-Depth Chemical and Optoelectronic Analysis of Triple-Cation Perovskite Thin Films by Combining XPS Profiling and PL Imaging. ACS Applied Materials & Interfaces, 2022, 14, 34228-34237.	4.0	13
3	Combined Pulsed RF GD-OES and HAXPES for Quantified Depth Profiling through Coatings. Coatings, 2021, 11, 702.	1.2	5
4	Probing the chemistry of perovskite systems by XPS and GD-OES depth-profiling: Potentials and limitations. , 2021, , .		0
5	Evolution of Cu(In,Ga)Se₂ surfaces under water immersion monitored by Xâ€ray photoelectron spectroscopy. Surface and Interface Analysis, 2020, 52, 975-979.	0.8	2
6	Inâ€depth analysis of InAlN/GaN HEMT heterostructure after annealing using angleâ€resolved Xâ€ray photoelectron spectroscopy. Surface and Interface Analysis, 2020, 52, 914-918.	0.8	1
7	Xâ€ray photoelectron spectroscopy characterization of Cu compounds for the development of organic protection treatments dedicated to heritage Cu objects preservation. Surface and Interface Analysis, 2020, 52, 1011-1016.	0.8	2
8	Cu depletion on Cu(In,Ga)Se2 surfaces investigated by chemical engineering: An x-ray photoelectron spectroscopy approach. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	7
9	Investigation of dielectric layers laser ablation mechanism on n-PERT silicon solar cells for (Ni) plating process: Laser impact on surface morphology, composition, electrical properties and metallization quality. Solar Energy Materials and Solar Cells, 2019, 202, 110149.	3.0	6
10	Multiscale Study of Interactions Between Corrosion Products Layer Formed on Heritage Cu Objects and Organic Protection Treatments. Heritage, 2019, 2, 2640-2651.	0.9	6
11	Evaluation of the chemical and optical perturbations induced by Ar plasma on InP surface. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, .	0.6	3
12	A challenge for x-ray photoelectron spectroscopy characterization of Cu(In,Ga)Se2 absorbers: The accurate quantification of Ga/(Gaâ€¯+â€¯In) ratio. Thin Solid Films, 2019, 669, 425-429.	0.8	13
13	Sodium enhances indium-gallium interdiffusion in copper indium gallium diselenide photovoltaic absorbers. Nature Communications, 2018, 9, 826.	5.8	51
14	Material challenges for solar cells in the twenty-first century: directions in emerging technologies. Science and Technology of Advanced Materials, 2018, 19, 336-369.	2.8	162
15	XPS study during a soft and progressive sputtering of a monolayer on indium phosphide by argon cluster bombardment. Surface and Interface Analysis, 2018, 50, 1163-1167.	0.8	2
16	Ammoniaâ€free, room temperature, and reusable photochemical bath for the deposition of <scp>Zn(S,O)</scp> buffer layers in <scp>Cu(In,Ga)Se₂</scp> thinâ€film solar cells. Progress in Photovoltaics: Research and Applications, 2018, 26, 332-341.	4.4	6
17	Investigations of the Anodic Porous Etching of n-InP in HCl by Atomic Absorption and X-ray Photoelectron Spectroscopies. Journal of the Electrochemical Society, 2018, 165, H3131-H3137.	1.3	3
18	Use of a New Organic Complexing and Buffer Agent for Zn(S,O) Deposition for High-Efficiency Cu(In,Ga)Se2-Based Solar Cells. IEEE Journal of Photovoltaics, 2018, 8, 266-271.	1.5	2

#	ARTICLE	IF	CITATIONS
19	Coupling GD-OES and XPS profiling to perform advanced physico-chemical characterizations of III-V layers for photovoltaic applications. , 2018, , .		1
20	New insights on the chemistry of plasma-enhanced atomic layer deposition of indium oxysulfide thin films and their use as buffer layers in Cu(In,Ga)Se2 thin film solar cell. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, 061510.	0.9	10
21	Fast Chemical Bath Deposition Process at Room Temperature of ZnS-Based Materials for Buffer Application in High-Efficiency Cu(In,Ga)Se₂-Based Solar Cells. IEEE Journal of Photovoltaics, 2018, 8, 1862-1867.	1.5	3
22	Versatile perovskite solar cell encapsulation by low-temperature ALD-Al₂O₃with long-term stability improvement. Sustainable Energy and Fuels, 2018, 2, 2468-2479.	2.5	66
23	Study of Gallium Front Grading at Low Deposition Temperature on Polyimide Substrates and Impacts on the Solar Cell Properties. IEEE Journal of Photovoltaics, 2018, 8, 1852-1857.	1.5	7
24	Multitechnique investigation of sulfur phases in the corrosion product layers of iron corroded in longâ€term anoxic conditions: From micrometer to nanometer scale. Surface and Interface Analysis, 2018, 50, 1036-1041.	0.8	0
25	Incorporation of the Organic Additives during the Damascene or TSV Process: Influence of the Applied Waveform. ECS Transactions, 2017, 77, 153-162.	0.3	0
26	Optical properties of ultrathin CIGS films studied by spectroscopic ellipsometry assisted by chemical engineering. Applied Surface Science, 2017, 421, 643-650.	3.1	21
27	Light absorption enhancement in ultra-thin Cu(In,Ga)Se 2 solar cells by substituting the back-contact with a transparent conducting oxide based reflector. Thin Solid Films, 2017, 633, 202-207.	0.8	33
28	Cross strategy of surface and volume characterizations of chalcogenides thin films: Practical case of CIGS absorbers. , 2016, , .		0
29	Photochemical deposition of ZnS buffer layers for Cu(In, Ga)Se<inf>2</inf> thin film solar cells via reusable solutions. , 2016, , .		0
30	Control of High Quality SrVO₃ Electrode in Oxidizing Atmosphere. Advanced Materials Interfaces, 2016, 3, 1600274.	1.9	31
31	A better understanding of Cbd-Zn(S,O) using hydrogen peroxide as an additive. Thin Solid Films, 2016, 619, 25-32.	0.8	4
32	Impact of the deposition conditions of buffer and windows layers on lowering the metastability effects in Cu(In,Ga)Se2/Zn(S,O)-based solar cell. , 2016, , .		2
33	Localised metallisation process for silicon solar cells. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 1427-1432.	0.8	0
34	GD-OES and XPS coupling: A new way for the chemical profiling of photovoltaic absorbers. Applied Surface Science, 2015, 347, 799-807.	3.1	21
35	Toward a Better Understanding of the Use of Additives in Zn(S,O) Deposition Bath for High-Efficiency Cu(In,Ga)Se₂-Based Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 1821-1826.	1.5	13
36	Deposition of ultra thin CuInS₂absorber layers by ALD for thin film solar cells at low temperature (down to 150 Â°C). Nanotechnology, 2015, 26, 054001.	1.3	20

#	Article	IF	Citations
37	Study of atomic layer deposition of indium oxy-sulfide films for Cu(In,Ga)Se 2 solar cells. Thin Solid Films, 2015, 582, 340-344.	0.8	12
38	Effects of additives on the improved growth rate and morphology of Chemical Bath Deposited Zn(S,O,OH) buffer layer for Cu(In,Ga)Se2- based solar cells. Materials Research Society Symposia Proceedings, 2013, 1538, 39-44.	0.1	0
39	Search for new bath formulations Of Zn(S, O, OH) buffer layer to outperform record performances Of CdS-based CIGSe solar cells. , 2013, , .		2
40	Study of Copper Electrodeposition Mechanism on Molybdenum Substrate. Journal of the Electrochemical Society, 2013, 160, D3103-D3109.	1.3	13
41	Toward high efficiency ultra-thin CIGSe based solar cells using light management techniques. , 2012, , .		4
42	Fundamentals of III-V Semiconductor Electrochemistry and Wet Etching Processes: Br2 Etching Properties onto InP. ECS Transactions, 2011, 35, 61-66.	0.3	0
43	Ultrathin Cu(In, Ga)Se<inf>2</inf> solar cells. , 2011, , .		0
44	(Invited) Recent Advances in Electrodeposition of Interfacial Buffer Layers in Chalcopyrite-Based Solar Cells. ECS Transactions, 2011, 35, 127-134.	0.3	1
45	Morphology-to-properties correlations in anodic porous InP layers. Journal of Solid State Electrochemistry, 2010, 14, 1177-1184.	1.2	2
46	Distinction between surface hydroxyl and ether groups on boron-doped diamond electrodes using a chemical approach. Electrochemistry Communications, 2010, 12, 351-354.	2.3	48
47	Comments About the Mechanism of Porous Layer Growth: Case of InP. ECS Transactions, 2009, 16, 411-416.	0.3	0
48	Spontaneous Deposition of Metallic Pt onto n-InP: An Electroless Process. ECS Transactions, 2009, 19, 221-225.	0.3	0
49	Unexpected Dissolution Process at Porous n-InP Electrodes. ECS Transactions, 2009, 19, 313-319.	0.3	4
50	Effects of "P-N" Terminations on the Initial Stages of Pore Growth onto n-InP in HCl Aqueous Solution. ECS Transactions, 2009, 19, 305-312.	0.3	0
51	Comparison of the chemical composition of boron-doped diamond surfaces upon different oxidation processes. Electrochimica Acta, 2009, 54, 5818-5824.	2.6	79