Marin Rusu

List of Publications by Year in descending order

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72 papers	1,352 citations	361413 20 h-index	377865 34 g-index
72 all docs	72 docs citations	72 times ranked	1913 citing authors

#	Article	IF	Citations
1	High-resolution work function imaging of single grains of semiconductor surfaces. Applied Physics Letters, 2002, 80, 2979-2981.	3.3	145
2	Tuning halide perovskite energy levels. Energy and Environmental Science, 2021, 14, 1429-1438.	30.8	124
3	In situ X-ray photoelectron spectroscopy study of the oxidation of CuGaSe2. Surface Science, 2005, 580, 80-94.	1.9	69
4	Metalâ€Free Photocatalytic Graphitic Carbon Nitride on pâ€Type Chalcopyrite as a Composite Photocathode for Lightâ€Induced Hydrogen Evolution. ChemSusChem, 2012, 5, 1227-1232.	6.8	53
5	Hole blocking PbI₂ /CH₃ NH₃ PbI₃ interface. Physica Status Solidi - Rapid Research Letters, 2014, 08, 763-766.	2.4	46
6	BaZrS₃ Chalcogenide Perovskite Thin Films by H₂S Sulfurization of Oxide Precursors. Journal of Physical Chemistry Letters, 2021, 12, 2148-2153.	4.6	46
7	Current-voltage characteristics and transport mechanism of solar cells based on ZnO nanorods/In2S3â•CuSCN. Applied Physics Letters, 2008, 93, .	3.3	43
8	Monolayer passivation of the transparent electrode in organic solar cells. Thin Solid Films, 2005, 488, 270-273.	1.8	37
9	Formation of the physical vapor deposited CdSâ•Cu(In,Ga)Se2 interface in highly efficient thin film solar cells. Applied Physics Letters, 2006, 88, 143510.	3.3	34
10	CuGaSe2 thin films prepared by a novel CCSVT technique for photovoltaic application. Thin Solid Films, 2004, 451-452, 556-561.	1.8	33
11	Surface photovoltage analysis of thin CdS layers on polycrystalline chalcopyrite absorber layers by Kelvin probe force microscopy. Nanotechnology, 2008, 19, 145705.	2.6	32
12	Optimisation of the CBD CdS deposition parameters for ZnO/CdS/CuGaSe2/Mo solar cells. Journal of Physics and Chemistry of Solids, 2003, 64, 1849-1853.	4.0	30
13	Effects of oxygen and illumination on the photovoltaic properties of organic solar cells based on phtalocyanine:fullerene bulk heterojunction. Applied Physics Letters, 2007, 90, 153511.	3.3	29
14	Current transport in ZnO/ZnS/Cu(In,Ga)(S,Se)2 solar cell. Journal of Physics and Chemistry of Solids, 2003, 64, 2037-2040.	4.0	27
15	Formation of the charge selective contact in solar cells with extremely thin absorber based on ZnO-nanorod/In2S3/CuSCN. Journal of Applied Physics, 2009, 105, .	2.5	26
16	Three-dimensional structure of the buffer/absorber interface in CdS/CuGaSe2 based thin film solar cells. Applied Physics Letters, 2009, 95, 173502.	3.3	25
17	Electrical and luminescent properties of CuGaSe2 crystals and thin films. Solar Energy Materials and Solar Cells, 2001, 70, 175-186.	6.2	24
18	Advantageous light management in Cu(In,Ga)Se2 superstrate solar cells. Solar Energy Materials and Solar Cells, 2016, 150, 76-81.	6.2	24

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19	X-ray irradiation induced effects on the chemical and electronic properties of MoO 3 thin films. Journal of Electron Spectroscopy and Related Phenomena, 2016, 212, 50-55.	1.7	23
20	The role of the CdS buffer layer in CuGaSe₂-based solar cells. Journal of Physics Condensed Matter, 2007, 19, 356222.	1.8	21
21	A two-dimensional modeling of the fine-grained polycrystalline silicon thin-film solar cells. Thin Solid Films, 2002, 403-404, 258-262.	1.8	20
22	Tunability of MoO₃ Thin-Film Properties Due to Annealing in Situ Monitored by Hard X-ray Photoemission. ACS Omega, 2019, 4, 10985-10990.	3.5	20
23	Deposition and characterization of Ga2Se3thin films prepared by a novel chemical close-spaced vapour transport technique. Journal of Physics Condensed Matter, 2003, 15, 8185-8193.	1.8	19
24	Cd2+âˆ•NH3 treatment-induced formation of a CdSe surface layer on CuGaSe2 thin-film solar cell absorbers. Applied Physics Letters, 2005, 86, 222107.	3.3	19
25	Fine tailored interpenetrating donorâ€“acceptor morphology by OVPD for organic solar cells. Thin Solid Films, 2008, 516, 7160-7166.	1.8	19
26	CuGa Se chalcopyrite-related thin films grown by chemical close-spaced vapor transport (CCSVT) for photovoltaic application: Surface- and bulk material properties, oxidation and surface Ge-doping. Solar Energy Materials and Solar Cells, 2011, 95, 1555-1580.	6.2	19
27	Hybrid solar cells with ZnO-nanorods and dry processed small molecule absorber. Applied Physics Letters, 2014, 104, .	3.3	19
28	Organic donor, acceptor and buffer layers of small molecules prepared by OVPD technique for photovoltaics. Renewable Energy, 2008, 33, 254-258.	8.9	18
29	Formation of charge-selective Mgâ€“Ag electrodes to CuPc:C60 blend layers. Applied Physics Letters, 2010, 97, .	3.3	18
30	ZnO/NiO heterostructures with enhanced photocatalytic activity obtained by ultrasonic spraying of a NiO shell onto ZnO nanorods. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 648, 129366.	4.7	18
31	CuGaSe2â€“CuGa3Se5 phase transition in CCSVT-grown thin films. Thin Solid Films, 2006, 511-512, 623-627.	1.8	16
32	Indium tin oxide thin-films prepared by vapor phase pyrolysis for efficient silicon based solar cells. Thin Solid Films, 2016, 610, 35-41.	1.8	15
33	Water Adsorption Enhances Electrical Conductivity in Transparent P-Type CuI. ACS Applied Materials & Interfaces, 2020, 12, 48741-48747.	8.0	15
34	EBIC technique applied to polycrystalline silicon thin films: minority carrier diffusion length improvement by hydrogenation. Thin Solid Films, 2002, 403-404, 549-552.	1.8	14
35	Solar cells based on CCSVT-grown CuGaSe2â€”absorber and device properties. Thin Solid Films, 2005, 480-481, 341-346.	1.8	13
36	The chemical and electronic surface and interface structure of CuGaSe2 thin-film solar cell absorbers. Applied Physics Letters, 2008, 93, 232104.	3.3	13

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37	Engineering of hybrid interfaces in organic photovoltaic devices. Solar Energy Materials and Solar Cells, 2011, 95, 1489-1494.	6.2	13
38	Chemical Interaction at the MoO₃/CH₃NH₃PbI_{3â€“x}Cl_x Interface. ACS Applied Materials & Interfaces, 2021, 13, 17085-17092.	8.0	13
39	Electronic Structure of the CdS/Cu(In,Ga)Se₂ Interface of KF- and RbF-Treated Samples by Kelvin Probe and Photoelectron Yield Spectroscopy. ACS Applied Materials & Interfaces, 2021, 13, 7745-7755.	8.0	12
40	A comparative study of (ZnO, In2O3: SnO2, SnO2)/CdS/CdTe/(Cu/)Ni heterojunctions. Thin Solid Films, 2013, 535, 244-248.	1.8	10
41	Silicon carbide nanolayers as a solar cell constituent. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 184-188.	1.8	10
42	Transient and modulated charge separation at CuInSe2/C60 and CuInSe2/ZnPc hybrid interfaces. Applied Surface Science, 2017, 396, 366-374.	6.1	10
43	Contribution of the ZnSe/CuGaSe2 heterojunction in photovoltaic performances of chalcopyrite-based solar cells. Thin Solid Films, 2002, 403-404, 344-348.	1.8	9
44	Intensity and temperature dependent characterization of eta solar cell. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1713-1718.	1.8	9
45	Bulk photovoltaic effect in carbon-doped gallium nitride revealed by anomalous surface photovoltage spectroscopy. Physical Review B, 2020, 101, .	3.2	9
46	High-Efficient ZnO/PVD-CdS/Cu(In,Ga)Se₂ Thin Film Solar Cells: Formation of the Buffer-Absorber Interface and Transport Properties. Materials Research Society Symposia Proceedings, 2005, 865, 14251.	0.1	8
47	AgGaSe₂thin films grown by chemical close-spaced vapor transport for photovoltaic applications: structural, compositional and optical properties. Journal of Physics Condensed Matter, 2012, 24, 175801.	1.8	8
48	CuGaSe₂-Based Solar Cells with High Open Circuit Voltage. Materials Research Society Symposia Proceedings, 2007, 1012, 1.	0.1	7
49	Germanium doping of wider-band-gap<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>CuGaSe</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Local and electronic structure. Physical Review B, 2010, 81, .	3.2	7
50	Electronic transitions and band offsets in C60:SubPc and C60:MgPc on MoO3 studied by modulated surface photovoltage spectroscopy. Journal of Applied Physics, 2015, 118, .	2.5	7
51	Charge carrier transport in ZnO/CdS/CdTe/(Cu)/Ni heterojunctions. Thin Solid Films, 2013, 535, 241-243.	1.8	6
52	Interface characterisation of ZnSe/CuGaSe2 heterojunction. Solar Energy, 2002, 72, 235-241.	6.1	5
53	Structural peculiarities of CCSVT-grown CuGaSe2 thin films. Thin Solid Films, 2005, 480-481, 352-357.	1.8	5
54	Effects of annealing on elemental composition and quality of CZTSSe thin films obtained by spray pyrolysis. Surface Engineering and Applied Electrochemistry, 2016, 52, 509-514.	0.8	5

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55	OVPDÂ®technology. EPJ Applied Physics, 2009, 46, 12506.	0.7	4
56	Optical constants of diindenoperylene in the dependence of preparation temperature and pressure. Thin Solid Films, 2013, 534, 255-259.	1.8	4
57	Decay mechanisms in CdSâ€buffered Cu(In,Ga)Se₂ thinâ€film solar cells after exposure to thermal stress: Understanding the role of Na. Progress in Photovoltaics: Research and Applications, 2021, 29, 1034-1053.	8.1	4
58	Transport properties of CuGaSe2-based thin-film solar cells as a function of absorber composition. Thin Solid Films, 2011, 519, 7304-7307.	1.8	3
59	Stable Organic Solar Cells with Mg:Ag Contacts. Energy Procedia, 2012, 31, 96-101.	1.8	3
60	Cu<scp>I</scp>n_{1â^'x}<scp>F</scp>e_x<scp>S</scp>₂ â€“ from the new metastable sphalerite to the stable chalcopyrite phase. Physica Status Solidi (B): Basic Research, 2014, 251, 224-228.	1.5	3
61	Photovoltaic structures ITO/SiO Ñ... /n-Si of increased efficiency. Surface Engineering and Applied Electrochemistry, 2016, 52, 284-288.	0.8	3
62	T(x) phase diagram of the CuSbS₂â€“CuInS₂ system and solubility limit of Sb in CuInS₂. Crystal Research and Technology, 2013, 48, 641-648.	1.3	2
63	CuInSe 2 nanostructures prepared by chemical close-spaced vapor transport for hybrid photovoltaic devices. Thin Solid Films, 2017, 633, 185-192.	1.8	2
64	Elucidating the Effect of the Different Buffer Layers on the Thermal Stability of CIGSe Solar Cells. IEEE Journal of Photovoltaics, 2021, 11, 648-657.	2.5	2
65	Effects of Ge-Implantation on the Photoluminescence of CuGaSe2 Thin Films. Materials Research Society Symposia Proceedings, 2005, 865, 5271.	0.1	1
66	Optical Properties of Thin Films of Haycockite. MRS Advances, 2019, 4, 2023-2033.	0.9	1
67	Performance and Transport Properties of Phthalocyanine:Fullerene Organic Solar Cells. Springer Proceedings in Physics, 2009, , 195-198.	0.2	1
68	Electron Spin Resonance and Ultra Violet (UV) Photoluminescence of Ge Implanted CuGaSe2 Thin Films Prepared by the CCSVT (Chemical Close-spaced Vapor Transport) Technique. Materials Research Society Symposia Proceedings, 2007, 1012, 1.	0.1	0
69	Low-temperature Photoluminescence Studies of CdTe Thin Films Deposited on CdS/ZnO/Glass Substrates. Materials Research Society Symposia Proceedings, 2013, 1538, 261-267.	0.1	0
70	The investigation of TCO/CdS/CdTe heterojunctions by C-U and C-f measurements: Experiment and modeling. , 2013, , .		0
71	Effective Mg:Ag / MoO3 recombination zone for tandem organic photovoltaic devices. Materials Research Society Symposia Proceedings, 2015, 1737, 32.	0.1	0
72	Waveguide effect enhancement of local photocurrent in hybrid organic/inorganic solar cells. Nanotechnology, 2019, 30, 245401.	2.6	0