Cristobal Voz Sanchez

List of Publications by Year in Descending Order

123 papers	2,605 citations	27 h-index	47 g-index
134 ext. papers	2,952 ext. citations	4.1 avg, IF	4.84 L-index

#	Paper	IF	Citations
123	Ultrathin Wide-Bandgap a-Si:H-Based Solar Cells for Transparent Photovoltaic Applications. *Solar Rrl*, **2022**, 6, 2100909	7.1	0
122	Atomic layer deposition of vanadium oxide films for crystalline silicon solar cells.. *Materials Advances*, **2022**, 3, 337-345	3.3	5
121	Interdigitated back-contacted crystalline silicon solar cells fully manufactured with atomic layer deposited selective contacts. *Solar Energy Materials and Solar Cells*, **2022**, 240, 111731	6.4	2
120	Influence of wavelength and pulse duration on the selective laser ablation of WOx, VOx and MoOx thin films.. *Surfaces and Interfaces*, **2021**, 101613	4.1	1
119	Thin c-Si Solar Cells Based on VOx Heterojunctions With Texturized Rear Surface. *IEEE Journal of Photovoltaics*, **2021**, 1-5	3.7	
118	Hole Transport Layer based on atomic layer deposited V2Ox films: Paving the road to semi-transparent CZTSe solar cells. *Solar Energy*, **2021**, 226, 64-71	6.8	0
117	Deposition and characterisation of sputtered molybdenum oxide thin films with hydrogen atmosphere. *Applied Surface Science*, **2021**, 563, 150285	6.7	2
116	Shedding Light on the Negative Differential Resistance Effect Observed in Organic Thin-Film Transistors. *ACS Applied Electronic Materials*, **2020**, 2, 1574-1582	4	1
115	Low-Cost High-Sensitive Suns□$V_{text{oc}}$ Measurement Instrument to Characterize c-Si Solar Cells. *IEEE Transactions on Instrumentation and Measurement*, **2020**, 69, 6429-6435	5.2	4
114	Influence of Co-Sputtered Ag:Al Ultra-Thin Layers in Transparent VO/Ag:Al/AZO Hole-Selective Electrodes for Silicon Solar Cells. *Materials*, **2020**, 13,	3.5	4
113	Near 5% DMSO is the best: A structural investigation of PEDOT: PSS thin films with strong emphasis on surface and interface for hybrid solar cell. *Applied Surface Science*, **2020**, 499, 143967	6.7	26
112	Satisfying both interfacial- and bulk requirements for organic photovoltaics: Bridged-triphenylamines with extended □conjugated systems as efficient new molecules. *Organic Electronics*, **2019**, 73, 137-145	3.5	3
111	Improved Electron Selectivity in Silicon Solar Cells by Cathode Modification with a Dipolar Conjugated Polyelectrolyte Interlayer. *ACS Applied Energy Materials*, **2019**, 2, 5954-5959	6.1	4
110	Multicrystalline Silicon Thin-Film Solar Cells Based on Vanadium Oxide Heterojunction and Laser-Doped Contacts. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1900393	1.6	4
109	Germanium photovoltaic cells with MoOx hole-selective contacts. *Solar Energy*, **2019**, 181, 357-360	6.8	10
108	Influence of a Gold Seed in Transparent V2Ox/Ag/V2Ox Selective Contacts for Dopant-Free Silicon Solar Cells. *IEEE Journal of Photovoltaics*, **2019**, 9, 72-77	3.7	5
107	Defect states assisted charge conduction in Au/MoO3□/n-Si Schottky barrier diode. *Materials Research Express*, **2019**, 6, 036303	1.7	10

106	Interdigitated back-contacted crystalline silicon solar cells with low-temperature dopant-free selective contacts. *Journal of Materials Chemistry A*, **2018**, 6, 3977-3985	13	36
105	Transport mechanisms in silicon heterojunction solar cells with molybdenum oxide as a hole transport layer. *Solar Energy Materials and Solar Cells*, **2018**, 185, 61-65	6.4	29
104	V2Ox-based hole-selective contacts for c-Si interdigitated back-contacted solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 9182-9189	13	78
103	Superior performance of V 2 O 5 as hole selective contact over other transition metal oxides in silicon heterojunction solar cells. *Solar Energy Materials and Solar Cells*, **2017**, 168, 221-226	6.4	90
102	Fully low temperature interdigitated back-contacted c-Si(n) solar cells based on laser-doping from dielectric stacks. *Solar Energy Materials and Solar Cells*, **2017**, 169, 107-112	6.4	12
101	Interdigitated back contacted c-Si(p) solar cells with photovoltaic efficiencies beyond 22% **2017**,		2
100	Origin of passivation in hole-selective transition metal oxides for crystalline silicon heterojunction solar cells. *Journal of Materials Research*, **2017**, 32, 260-268	2.5	102
99	Passivating/hole-selective contacts based on V2O5/SiOx stacks deposited at ambient temperature. *Energy Procedia*, **2017**, 124, 584-592	2.3	24
98	Analysis of temperature dependent current-voltage and capacitance-voltage characteristics of an Au/V2O5/n-Si Schottky diode. *AIP Advances*, **2017**, 7, 085313	1.5	43
97	A prototype reactor for highly selective solar-driven CO2 reduction to synthesis gas using nanosized earth-abundant catalysts and silicon photovoltaics. *Energy and Environmental Science*, **2017**, 10, 2256-2266	35.4	87
96	High efficiency ITO-free hybrid solar cell using highly conductive PEDOT:PSS with co-solvent and surfactant treatments. *Materials Letters*, **2017**, 186, 165-167	3.3	11
95	Transition metal oxides as hole-selective contacts in silicon heterojunctions solar cells. *Solar Energy Materials and Solar Cells*, **2016**, 145, 109-115	6.4	254
94	Main properties of Al2O3 thin films deposited by magnetron sputtering of an Al2O3 ceramic target at different radio-frequency power and argon pressure and their passivation effect on p-type c-Si wafers. *Thin Solid Films*, **2016**, 619, 288-296	2.2	26
93	PEDOT:PSS as an Alternative Hole Selective Contact for ITO-Free Hybrid Crystalline Silicon Solar Cell. *IEEE Journal of Photovoltaics*, **2016**, 6, 934-939	3.7	20
92	Microscale Characterization of Surface Recombination at the Vicinity of Laser-Processed Regions in c-Si Solar Cells. *IEEE Journal of Photovoltaics*, **2016**, 6, 426-431	3.7	5
91	Cold Process for IBC c-Si Solar Cells Fabrication. *Energy Procedia*, **2016**, 92, 652-660	2.3	3
90	Back Junction n-type Silicon Heterojunction Solar Cells with V2O5 Hole-selective Contact. *Energy Procedia*, **2016**, 92, 633-637	2.3	21
89	IBC c-Si(n) Solar Cells Based on Laser Doping Processing for Selective Emitter and Base Contact Formation. *Energy Procedia*, **2016**, 92, 956-961	2.3	7

88	Experimental determination of base resistance contribution for point-like contacted c-Si solar cells using impedance spectroscopy analysis. *Solar Energy Materials and Solar Cells*, **2015**, 141, 350-355	6.4	2
87	Emitter formation using laser doping technique on n- and p-type c-Si substrates. *Applied Surface Science*, **2015**, 336, 182-187	6.7	8
86	Low Surface Recombination in Silicon-Heterojunction Solar Cells With Rear Laser-Fired Contacts From Aluminum Foils. *IEEE Journal of Photovoltaics*, **2015**, 5, 805-811	3.7	10
85	Large Stokes shift downshifting Eu(III) films as efficiency enhancing UV blocking layers for dye sensitized solar cells. *Physica Status Solidi (A) Applications and Materials Science*, **2015**, 212, 203-210	1.6	20
84	Laser Induced Forward Transfer for front contact improvement in silicon heterojunction solar cells. *Applied Surface Science*, **2015**, 336, 89-95	6.7	10
83	Base contacts and selective emitters processed by laser doping technique for p-type IBC c-Si solar cells. *Energy Procedia*, **2015**, 77, 752-758	2.3	4
82	Characterization of Transition Metal Oxide/Silicon Heterojunctions for Solar Cell Applications. *Applied Sciences (Switzerland)*, **2015**, 5, 695-705	2.6	66
81	High efficiency interdigitated back-contact c-Si(p) solar cells **2015**,		2
80	Study of the Surface Recombination Velocity for Ultraviolet and Visible Laser-Fired Contacts Applied to Silicon Heterojunction Solar Cells. *IEEE Journal of Photovoltaics*, **2015**, 5, 1006-1013	3.7	3
79	Compositional influence on the electrical performance of zinc indium tin oxide transparent thin-film transistors. *Thin Solid Films*, **2014**, 555, 107-111	2.2	3
78	Rear Contact Pattern Optimization based on 3D Simulations for IBC Solar Cells with Point-like Doped Contacts. *Energy Procedia*, **2014**, 55, 47-52	2.3	10
77	Restraints in low dimensional organic semiconductor devices at high current densities. *Organic Electronics*, **2014**, 15, 211-215	3.5	1
76	Recovery of Indium-tin-oxide/silicon Heterojunction Solar Cells by Thermal Annealing. *Energy Procedia*, **2014**, 44, 3-9	2.3	6
75	Optimization of Laser Processes for Local Rear Contacting of Passivated Silicon Solar Cells. *Energy Procedia*, **2014**, 44, 234-243	2.3	6
74	Influence of the density of states on the open-circuit voltage in small-molecule solar cells. *Organic Electronics*, **2014**, 15, 2553-2560	3.5	11
73	On the observation of electron□hole liquid luminescence under low excitation in Al2O3-passivated c-Si wafers. *Physica Status Solidi - Rapid Research Letters*, **2014**, 8, 943-947	2.5	3
72	Progress in silicon heterojunction solar cell fabrication with rear laser-fired contacts **2013**,		2
71	New laser-based approaches to improve the passivation and rear contact quality in high efficiency crystalline silicon solar cells **2013**,		1

70	Analysis of the dynamic short-circuit resistance in organic bulk-heterojunction solar cells: relation to the charge carrier collection efficiency. *Organic Electronics*, **2013**, 14, 1643-1648	3.5	10
69	Surface passivation and optical characterization of Al2O3/a-SiCx stacks on c-Si substrates. *Beilstein Journal of Nanotechnology*, **2013**, 4, 726-31	3	24
68	Comparison between the density-of-states of picene transistors measured in air and under vacuum. *Synthetic Metals*, **2012**, 161, 2554-2557	3.6	9
67	p-type c-Si solar cells based on rear side laser processing of Al2O3/SiCx stacks. *Solar Energy Materials and Solar Cells*, **2012**, 106, 80-83	6.4	36
66	Parameterization of local laser doping and laser-fired contacts for high efficiency c-Si solar cells. *Physics Procedia*, **2012**, 39, 693-701		4
65	Laser-fired contact optimization in c-Si solar cells. *Progress in Photovoltaics: Research and Applications*, **2012**, 20, 173-180	6.8	41
64	Determination of the Density of States on N-type Ptcdi-c13 Organic Thin-film Semiconductor. *Materials Research Society Symposia Proceedings*, **2012**, 1435, 36		
63	Influence of wavelength on laser doping and laser-fired contact processes for c-Si solar cells **2012**,		2
62	**2011**,		6
61	Density-of-states in pentacene from the electrical characteristics of thin-film transistors. *Organic Electronics*, **2010**, 11, 1333-1337	3.5	37
60	Surface recombination analysis in silicon-heterojunction solar cells. *Solar Energy Materials and Solar Cells*, **2010**, 94, 282-286	6.4	8
59	Development of LASER fired contacts on silicon heterojunction solar cells for the application to rear contact structures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, NA-NA		1
58	Optical stability of small-molecule thin-films determined by Photothermal Deflection Spectroscopy. *Materials Research Society Symposia Proceedings*, **2009**, 1154, 1		3
57	Optimization of KOH etching process to obtain textured substrates suitable for heterojunction solar cells fabricated by HWCVD. *Thin Solid Films*, **2009**, 517, 3578-3580	2.2	46
56	N-type PTCDI-C13H27 thin-film transistors deposited at different substrate temperature. *Thin Solid Films*, **2009**, 517, 6271-6274	2.2	27
55	Development of laser-fired contacts for amorphous silicon layers obtained by Hot-Wire CVD. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2009**, 159-160, 23-26	3.1	2
54	Optoelectronic properties of CuPc thin films deposited at different substrate temperatures. *Journal Physics D: Applied Physics*, **2009**, 42, 145102	3	40
53	Defect states in pentacene thin films prepared by thermal evaporation and Langmuir-Blodgett technique. *Journal of Non-Crystalline Solids*, **2008**, 354, 2888-2891	3.9	7

52	Recombination rates in heterojunction silicon solar cells analyzed by impedance spectroscopy at forward bias and under illumination. *Solar Energy Materials and Solar Cells*, **2008**, 92, 505-509	6.4	55
51	Progress in a-Si:H/c-Si heterojunction emitters obtained by Hot-Wire CVD at 200 ºC. *Thin Solid Films*, **2008**, 516, 761-764	2.2	12
50	Very low surface recombination velocity of crystalline silicon passivated by phosphorus-doped a-SicxNy:H(n) alloys. *Progress in Photovoltaics: Research and Applications*, **2008**, 16, 123-127	6.8	13
49	Low temperature back-surface-field contacts deposited by hot-wire CVD for heterojunction solar cells. *Thin Solid Films*, **2008**, 516, 6782-6785	2.2	5
48	Fullerene thin-film transistors fabricated on polymeric gate dielectric. *Thin Solid Films*, **2007**, 515, 7667-7670	2.2	8
47	Improving the efficiency of light-emitting diode based on a thiophene polymer containing a cyano group. *Organic Electronics*, **2007**, 8, 641-647	3.5	10
46	Photodiodes based on fullerene semiconductor. *Thin Solid Films*, **2007**, 515, 7675-7678	2.2	14
45	Experimental observation of oxygen-related defect state in pentacene thin films. *Applied Physics Letters*, **2007**, 90, 092112	3.4	36
44	Bifacial heterojunction silicon solar cells by hot-wire CVD with open-circuit voltages exceeding 600 mV. *Thin Solid Films*, **2006**, 511-512, 415-419	2.2	20
43	Effect of buffer layer on minority carrier lifetime and series resistance of bifacial heterojunction silicon solar cells analyzed by impedance spectroscopy. *Thin Solid Films*, **2006**, 514, 254-257	2.2	26
42	Characterization of bifacial heterojunction silicon solar cells obtained by hot-wire CVD. *Journal of Non-Crystalline Solids*, **2006**, 352, 1953-1957	3.9	4
41	Low level optical absorption measurements on organic semiconductors. *Journal of Non-Crystalline Solids*, **2006**, 352, 1663-1667	3.9	17
40	Copper phthalocyanine thin-film transistors with polymeric gate dielectric. *Journal of Non-Crystalline Solids*, **2006**, 352, 1778-1782	3.9	51
39	Study of a thiophene-based polymer for optoelectronic applications. *Thin Solid Films*, **2006**, 497, 16-19	2.2	25
38	Electronic properties of intrinsic and doped amorphous silicon carbide films. *Thin Solid Films*, **2006**, 511-512, 290-294	2.2	13
37	Optoelectronic devices based on evaporated pentacene films. *Solar Energy Materials and Solar Cells* , **2005**, 87, 567-573	6.4	31
36	Phosphorus-diffused silicon solar cell emitters with plasma enhanced chemical vapor deposited silicon carbide. *Solar Energy Materials and Solar Cells*, **2005**, 87, 667-674	6.4	10
35	Accurate modeling and parameter extraction method for organic TFTs. *Solid-State Electronics*, **2005**, 49, 1009-1016	1.7	116

34	Crystalline silicon surface passivation with amorphous SiCx:H films deposited by plasma-enhanced chemical-vapor deposition. *Journal of Applied Physics*, **2005**, 98, 114912	2.5	21
33	Flexible Pentacene/PMMA Thin-Film Transistors Fabricated on Aluminium Foil Substrates. *Materials Research Society Symposia Proceedings*, **2005**, 871, 1		2
32	Transverse Electrical Transport in Pentacene Photodiodes. *Materials Research Society Symposia Proceedings*, **2005**, 871, 1		
31	Improvement of crystalline silicon surface passivation by hydrogen plasma treatment. *Applied Physics Letters*, **2004**, 84, 1474-1476	3.4	30
30	IR-study of a-SiCx:H and a-SiCxNy:H films for c-Si surface passivation. *Thin Solid Films*, **2004**, 451-452, 340-344	2.2	36
29	Pentacene thin-film transistors with polymeric gate dielectric. *Organic Electronics*, **2004**, 5, 67-71	3.5	112
28	Electrical characterization of pentacene thin-film transistors with polymeric gate dielectric. *Synthetic Metals*, **2004**, 146, 355-358	3.6	19
27	Pentacene thin-film transistors on polymeric gate dielectric: device fabrication and electrical characterization. *Journal of Non-Crystalline Solids*, **2004**, 338-340, 617-621	3.9	36
26	Substrate influence on the properties of doped thin silicon layers grown by Cat-CVD. *Thin Solid Films*, **2003**, 430, 157-160	2.2	4
25	Surface passivation of crystalline silicon by Cat-CVD amorphous and nanocrystalline thin silicon films. *Thin Solid Films*, **2003**, 430, 270-273	2.2	16
24	Pentacene thin-films obtained by thermal evaporation in high vacuum. *Thin Solid Films*, **2003**, 427, 367-370	2.2	45
23	Characterization and application of a-SiCx:H films for the passivation of the c-Si surface. *Thin Solid Films*, **2002**, 403-404, 476-479	2.2	9
22	Surface passivation of n-type crystalline Si by plasma-enhanced-chemical-vapor-deposited amorphous SiCx:H and amorphous SiCxNy:H films. *Applied Physics Letters*, **2002**, 81, 4461-4463	3.4	46
21	Characterization of a-SiCx:H Films for c-Si Surface Passivation. *Materials Research Society Symposia Proceedings*, **2002**, 715, 2451		6
20	Electronic transport in low temperature nanocrystalline silicon thin-film transistors obtained by hot-wire CVD. *Journal of Non-Crystalline Solids*, **2002**, 299-302, 400-404	3.9	8
19	Thin-film transistors with polymorphous silicon active layer. *Journal of Non-Crystalline Solids*, **2002**, 299-302, 1345-1350	3.9	10
18	Optoelectronic studies in nanocrystalline silicon Schottky diodes obtained by hot-wire CVD. *Thin Solid Films*, **2001**, 383, 258-260	2.2	1
17	Analysis of bias stress on thin-film transistors obtained by Hot-Wire Chemical Vapour Deposition. *Thin Solid Films*, **2001**, 383, 307-309	2.2	19

16	Thin silicon films ranging from amorphous to nanocrystalline obtained by hot-wire CVD. *Thin Solid Films*, **2001**, 383, 189-191	2.2	4
15	Stability of hydrogenated nanocrystalline silicon thin-film transistors. *Thin Solid Films*, **2001**, 395, 335-338	2.2	26
14	Kelvin probe measurements of microcrystalline silicon on a nanometer scale using SFM. *Solar Energy Materials and Solar Cells*, **2001**, 66, 171-177	6.4	10
13	Microcrystalline silicon thin film transistors obtained by hot-wire CVD. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 69-70, 526-529	3.1	13
12	Optimisation of doped microcrystalline silicon films deposited at very low temperatures by hot-wire CVD. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 69-70, 278-283	3.1	25
11	Structure of microcrystalline silicon films deposited at very low temperatures by hot-wire CVD. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 69-70, 536-541	3.1	2
10	Microdoping compensation of microcrystalline silicon obtained by hot-wire chemical vapour deposition. *Solar Energy Materials and Solar Cells*, **2000**, 63, 237-246	6.4	6
9	Comparative study of microcrystalline silicon films prepared in low or high pressure regime by hot-wire chemical vapor deposition. *Journal of Non-Crystalline Solids*, **2000**, 266-269, 385-390	3.9	2
8	Thin film transistors obtained by hot wire CVD. *Journal of Non-Crystalline Solids*, **2000**, 266-269, 1304-1309	3.9	22
7	Analysis of the role of mobility-lifetime products in the performance of amorphous silicon p-i-n solar cells. *Journal of Applied Physics*, **1999**, 85, 2939-2951	2.5	8
6	Investigation of defect formation and electronic transport in microcrystalline silicon deposited by hot-wire CVD. *Physica B: Condensed Matter*, **1999**, 273-274, 540-543	2.8	4
5	The role of the buffer layer in the light of a new equivalent circuit for amorphous silicon solar cells. *Solar Energy Materials and Solar Cells*, **1999**, 57, 153-165	6.4	11
4	Stress in Hydrogenated Microcrystalline Silicon Thin Films. *Materials Research Society Symposia Proceedings*, **1999**, 557, 537		3
3	Improved equivalent circuit and analytical model for amorphous silicon solar cells and modules. *IEEE Transactions on Electron Devices*, **1998**, 45, 423-429	2.9	173
2	Optical and electrical characteristics of LEDs based on a single organic layer		1
1	Organic electronic devices: overview and future trends		1