

Sven Kluska

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1942500/publications.pdf>

Version: 2024-02-01

41
papers

319
citations

933447

10
h-index

996975

15
g-index

41
all docs

41
docs citations

41
times ranked

267
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrical and Mechanical Properties of Plated Ni/Cu Contacts for Si Solar Cells. Energy Procedia, 2015, 77, 733-743.	1.8	25
2	Progress of plated metallization for industrial bifacial TOPCon silicon solar cells. Progress in Photovoltaics: Research and Applications, 2022, 30, 615-621.	8.1	23
3	Interface oxides in femtosecond laser structured plated Ni-Cu-Ag contacts for silicon solar cells. Solar Energy Materials and Solar Cells, 2017, 166, 197-203.	6.2	22
4	Determination of Injection Dependent Recombination Properties of Locally Processed Surface Regions. Energy Procedia, 2013, 38, 22-31.	1.8	20
5	Native Oxide Barrier Layer for Selective Electroplated Metallization of Silicon Heterojunction Solar Cells. Solar Rrl, 2019, 3, 1900006.	5.8	20
6	High-Efficiency Silicon Solar Cells With Boron Local Back Surface Fields Formed by Laser Chemical Processing. IEEE Electron Device Letters, 2011, 32, 1257-1259.	3.9	18
7	Microcracks in Silicon Wafers II: Implications on Solar Cell Characteristics, Statistics and Physical Origin. IEEE Journal of Photovoltaics, 2016, 6, 136-144.	2.5	16
8	Laser Ablation and Ni/Cu Plating Approach for Tunnel Oxide Passivated Contacts Solar Cells with Variate Polysilicon Layer Thickness: Gains and Possibilities in Comparison to Screen Printing. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000474.	1.8	15
9	Hydrophobic AlO _x Surfaces by Adsorption of a SAM on Large Areas for Application in Solar Cell Metallization Patterning. ACS Applied Materials & Interfaces, 2021, 13, 5803-5813.	8.0	14
10	Easy Plating—A Simple Approach to Suppress Parasitically Metallized Areas in Front Side Ni/Cu Plated Crystalline Si Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 1270-1277.	2.5	12
11	Novel mask-less plating metallization route for bifacial silicon heterojunction solar cells. AIP Conference Proceedings, 2018, . .	0.4	11
12	Enabling stress determination on alkaline textured silicon using Raman spectroscopy. Energy Procedia, 2017, 124, 18-23.	1.8	10
13	Direct Contact Electroplating Sequence Without Initial Seed Layer for Bifacial TOPCon Solar Cell Metallization. IEEE Journal of Photovoltaics, 2021, 11, 584-590.	2.5	10
14	Local Series Resistance Imaging of Silicon Solar Cells With Complex Current Paths. IEEE Journal of Photovoltaics, 2015, 5, 752-758.	2.5	8
15	Optimizing Adhesion of Laser Structured Plated Ni-Cu Contacts with Insights from Micro Characterization. Energy Procedia, 2016, 92, 913-918.	1.8	8
16	Selective Boron Emitters Using Laser-Induced Forward Transfer Versus Laser Doping From Borosilicate Glass. IEEE Journal of Photovoltaics, 2017, 7, 1254-1263.	2.5	8
17	Influence of Plasma-Enhanced Chemical Vapor Deposition Poly-Si Layer Thickness on the Wrap-Around and the Quantum Efficiency of Bifacial n-TOPCon (Tunnel Oxide Passivated Contact) Solar Cells. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100156.	1.8	8
18	Passivation-Induced Cavity Defects in Laser-Doped Selective Emitter Si Solar Cells—Formation Model and Recombination Analysis. IEEE Journal of Photovoltaics, 2015, 5, 792-798.	2.5	6

#	ARTICLE	IF	CITATIONS
19	Large Area TOPCon Technology Achieving 23.4% Efficiency. , 2018, , .		6
20	Advances with resist-free copper plating approaches for the metallization of silicon heterojunction solar cells. AIP Conference Proceedings, 2019, , .	0.4	5
21	Establishing the "native oxide barrier layer for selective electroplated" metallization for bifacial silicon heterojunction solar cells. AIP Conference Proceedings, 2019, , .	0.4	5
22	Plated TOPCon solar cells & modules with reliable fracture stress and soldered module interconnection. EPJ Photovoltaics, 2021, 12, 10.	1.6	5
23	Benefits of different process routes for industrial direct front side plating. Energy Procedia, 2017, 124, 823-828.	1.8	4
24	Novel Approach for the Bonding of III-V on Silicon Tandem Solar Cells with a Transparent Conductive Adhesive. , 2018, , .		4
25	Electrical and optical analysis of a spray coated transparent conductive adhesive for two-terminal silicon based tandem solar cells. AIP Conference Proceedings, 2019, , .	0.4	4
26	Direct contact plating - Inline plating solution for ZEBRA IBC by local contacting. AIP Conference Proceedings, 2019, , .	0.4	4
27	Pathways and Potentials for III"V on Si Tandem Solar Cells Realized Using a ZnO-Based Transparent Conductive Adhesive. IEEE Journal of Photovoltaics, 2021, 11, 85-92.	2.5	4
28	Extracting physical properties of arbitrarily shaped laser-doped micro-scale areas in semiconductors. Applied Physics Letters, 2013, 103, .	3.3	3
29	Inhomogeneity of Plated Contacts for c-Si Solar Cells and Their Impact on Solar Cell Efficiency. IEEE Journal of Photovoltaics, 2020, 10, 1455-1462.	2.5	3
30	Micro Characterization and Imaging of Spikes in Nickel Plated Solar Cells. Energy Procedia, 2014, 55, 624-632.	1.8	2
31	Accurate potential drop sheet resistance measurements of laser-doped areas in semiconductors. Journal of Applied Physics, 2014, 116, 134505.	2.5	2
32	Development and characterization of multifunctional PECVD SiNX:P layers for laser-doped selective emitters. AIP Conference Proceedings, 2018, , .	0.4	2
33	Impact of Postplating Annealing on Defect Activation in Boron-Doped PERC Solar Cells. IEEE Journal of Photovoltaics, 2020, 10, 444-448.	2.5	2
34	The First Glued Tandem Solar Cell Using a ZnO Based Adhesive. , 2020, , .		2
35	Investigation of the Defect Distribution of Laser Contact Opening Applied to Poly"Si/SiN_x/sub> Stacks. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	1.8	2
36	Continuous Wave Laser Processing for Electrical and Mechanical Stable Solar Cells with Ni-Cu Metallization. Energy Procedia, 2014, 55, 665-669.	1.8	1

#	ARTICLE	IF	CITATIONS
37	Advances in PassDop technology: recombination and optics. Energy Procedia, 2017, 124, 313-320.	1.8	1
38	Optimized Adhesion of Plated Silicon Solar Cell Contacts by F ₂ -Based Dry Atmospheric Pressure Nano-Roughening. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800173.	1.8	1
39	Microcharacterization of Interface Oxide Layer on Laser-Structured Silicon Surfaces of Plated Ni-Cu Solar Cells. IEEE Journal of Photovoltaics, 2019, 9, 1532-1540.	2.5	1
40	Challenges in the Fabrication of a Glued III-V on Si Tandem Solar Cell Using a ZnO-Based TCA. , 2021, , .		1
41	Low-cost Cu-plated metallization on TCOs for SHJ Solar Cells - Optimization of PVD Contacting-layer. , 2020, , .		1