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Small Literature Survey of Recipes for DSSCs and ss-DSSCs

DSSCs with liquid electrolytes			B	asic Dye Pr	roperties			Solar Cell Characterization																Ele	ctron transport								
																		anode								sinterin			TiCl₄-treat	ment FTO	(TiO ₂)		
dye	1	reference	e / M ⁻¹ cm ⁻¹	at λ / nm	solvent	E _{HOMO} / eV	E _{LUMO} / eV	area / cm ²	Intensity	l _{sc} / (mA/cm ²)	U _{oc} / mV	FF	η/%	IPCE / %	at λ / nm	remaind η / %	at °C after h	comment	TCO Q	/ sq Cleaning	ng procedure e' c	cond.	layer / µm	lense/nm	applicat.	particle size/nn	n appl.	temp./°C	time/h	conc./mM	emp./*C	time/h	comment
Z907+HDMA	31	Wang2003							100 mW/cm ²	15.2	764	0.676	7.8			>90	55 1000		FTO			TiO ₂	10 (4)	-		20 (400)	SP	500	0.25	50 (40)	70	0.5	
Z907	31	Wang2003							100 mW/cm ²	14.2	713	0.708	7.2						FTO			TiO ₂	10 (4)	-		20 (400)	SP	500	0.25	50 (40)	70	0.5	
Z907	19	Kuang2008								13.9	731	0.69	7.0																				
K51	19	Kuang2008 Kuang2008								14.8	730	0.715	7.7																				
K19	22	Nazeeruddin2007							100 mW/cm?	14.4	747	0.00	8.0						ETO	det (15)	H/O Et UV/O/(18	TiO	maybe 12(3)			20(400)		500	0.5	40 (40)	70	0.5	
N719	11	Ito2005	1 74E+04	534	Et				roo mininam	16.6	778	0.731	9.4						ETO 1	10	.1120,21,01 03(10	TiO	14(4)			20(400)	SP	000	0.0	40 (40)	10	0.0	
N710	11	to2005	1.265.04	626						17.6	905	0.729	10.5						FTO 1	10		TIO	14(4)	1400		20(400)	CD.						
N719	11	Ito2005	1.002104							18.7	708	0.713	10.6						FTO 1	10		TiO.	14(4)	VDC		20(400)	SP.			40	70	0.5	
N719	22	Nazeenuddin2007							100 mW/cm?	15.82	785	0.75	9.31						FTO	10		TiO.	14(4)	100		20(400)	0.	500	0.5	40 (40)	70	0.5	
N710	2	Parablaa2006						0.795	roo mininam	10.02	100	0.10	5.01						FTO	•		TiO.	12				CP	450	0.5	40 (40)	10	0.0	
N719	2	Boschiou2006						0.765											FIO	0		TiO ₂	13				CP CD	450	0.5				
N719	24	Saito2008						0.765	(100 mW/cm?)	18.11	x + 200 621	0.585	6.58						FIO	0		7nO	16 1 (6 7)			(20-30)	UP	450	0.5				
N719	15	Karthikevan2007				-5.9	-3.4		(100 1117/0117)	10.11	021	0.000	0.00									2110	10.1 (0.7)			(20 00)							
N719	20	Martinson2007						0.28	906 W/m ²	3.3	739	0.64	1.6						AZO			ZnO	60			Al ₂ O ₃ template	ALD	400	0.5	-			ALD-ZnO on Al ₂ O ₃
N719	14	Kakiuchi2006							100 mW/cm ²	12.6	668	0.481	4.1	60	460-550				ITO	4		ZnO	20			ca. 12		450	0.6				
N719	21	Mozer2008								11.68	775	0.72	6.5						FTO 1	10	1	TiO2	4.5			13		550	0.5	-			
N719 N710	13	Jiang2006 Koope2000						0.14	100 mW/cm ²	19	0.66	0.70	8.9	max. 80	540				FIO 1	10 16 Ao Mo I	Hal	1iO2	12 (4)			20 (400)	DP	430 / 520	0.5	40			
N719	23	O'Began07			+	1	1	5x0 5cm	1 5011	8.00	0/0	1	3.02	14 OL.10	407				FTO	8		TiO	3			20	SP	570	10min	50	70	0.5	eilver etrinee
N3	9	Horiuchi2003	1 39E±04	541	AN:t-buta	-5.58	1	0.25	100 mW/cm8	16.77	698	0.54	63						FTO	•		TiO	<u> </u>			20	51	550	2	55	.5	0.0	anter amped
D102	a	Horiuchi2003	5.58E±04	491	AN:t-buta	5.56	1	0.25	100 mW/cm²	17.76	604	0.57	6.1						FTO			TiO						550	2				
NKX-2311	9	Horiuchi2003	J.JOL+04	49		-5.50	+	0.25	100 mW/cm2	16.1	491	0.37	3.3						FTO	-		TiO					+ +	330	2				
D21L6	112	Yum2009	3 70E±04	458	E	0.98V vs NHF	-1 35V vs NH	F	100 19 % sun	14.1	728	0.41	7.25			90	60 1000	stab test in I	110	-		TiO.					1						
DE	0	Hagborg2008	3.70LT04	450		0.304 45.14112	1.554 45.141	0.2	100.13 /8 Sull	19.1	600	0.71	F 04		- 450 560	30	00 1000	stab. test in i	ETO			TiO ₂	7 (5)			20 (400)	CD	500	0.5	1000 (1000)			
D7	0	Hagberg2000						0.2	100 mW/cm²	11	200	0.72	5.04	- 05	- 450-560				FTO			TiO ₂	7 (5)			20 (400)	CD	500	0.5	yes (yes)			
DA	0	Hagberg2000						0.2	100 mW/cm²	14	604	0.71	6.0	- 05	- 450-550				FTO			TiO ₂	7 (5)			20 (400)	CD	500	0.5	yes (yes)			
D3	0	Lashare 2000						0.2	100 mW/cm²	10.5	744	0.71	7.00	05	450 500	00	CO 1000		FTO			TiO ₂	7 (5)			20 (400)	SF CD	500	0.5	yes (yes)			
DII	0	Hagberg2008						0.2	100 mW/cm²	13.5	744	0.7	7.03	~ 65	~ 450-590	90	60 1000		FTO			TiO ₂	7 (5)			20 (400)	SP	500	0.5	yes (yes)			
DIA	0	hagberg2008	0.075.04	EQU				0.2	100 mw/cm-	12.3	/65	0.7	0.09	79	~ 450-590				FTO			TiO ₂	2.5 (5)			20 (400)	SP	500	0.5	yes (yes)	70	0.5	
0149	12	102008	0.0/E+04	520	2				100	19.96	777	0.694	9.03	. 00	450 500				FTO			TiO ₂	12.0(4-5)			(400)	SP	500	0.5	40 (40)	70	0.5	
(ZaDaa)	32	Wang2008							TOO MWY/CITE	13.35	111	0.749	1.0	>00 .	~ 450 - 560				FIO			TIO ₂	7(4)			20 (400)	SP	500	0.5				
(ZIIPOI)	4	Campbell2007						-											FIO	15		1102	10 (4)			20 (400)	ar	500	0.5				
D211.6	33	Yum2009			-				1 sun	13.44	686	0.65	5.98							_		TiO ₂											
C201	32	Wang2008							100 mW/cm ²	12.4	723	0.779	7			6.2	60 1000	stability test	NT FTO			TiO	7(4)			20 (400)	SP						
ss-DSSCs wi	th the	solid hole transport material	spiro-MeOT	AD:					100 1111/011	12.4	720	0.110				0.2	00 1000	Stubility tobt	110				7(4)			20 (400)	0.						
N3	1	Bach1998			Et.				9.4 mW/cm ²	0.32	342	0.62	0.74	33		80-120 %	80 h		FTO 1	10		TiO ₂	4.2	yes	SPD		SP						
N719	17	Krüger2001						1.07	100 mW/cm ²	5	910		2.56	~37	520	95%	RT 3 month		FTO 1	10		TiO ₂	2.5	yes	SPD								
N719	18	Krüger2002						0.16		3.5	821	0.69	2.1																				
N719	18	Krüger2002						0.16		4.6	931	0.71	3.2																				
N719	6	Fabregat-Santiago2006						0.2					1.0									TiO ₂	6	sev. tens		12		450	0.5				
Zn-1	25	Schmidt-Mende2005		1		-5.62	-3.46		100 mW/cm ²	5.0	731	0.663	2.44	20 / 60 5	60-630/440				FTO 1	10		TiO ₂	~ 2	<100	SPD	18	DB	450					
Zn-2	25	Schmidt-Mende2005				-5.52	-3.56		100 mW/cm ²	5.9	790	0.651	3.0	25 / 65 5	70-650/440				FTO 1	10		TiO ₂	~ 2	<100	SPD	18	DB	450					
D102	27	Schmidt-Mende2005b	5.58E+04					0.152	100 mW/cm ²	7.7	866	0.612	4.1	~60	440-550			cheap dye	FTO			TiO ₂	1.6	100	SPD	18		450		20			
Z907	26	Schmidt-Mende2005a							100 mW/cm ²	8.3	752	0.64	4.0									TiO ₂	2	yes	SPD		DB	450					
Z907	26	Schmidt-Mende2005a							100 mW/cm ²	5.5	858	0.67	3.1									TiO ₂	2	yes	SPD		DB	450		-			
Z907	28	Schmidt-Mende2006			1	1			100 mW/cm ²	8.32	752	0.643	4.03						FTO	Ac, Me,	Hel.	TiO ₂	2	100	SPD	19	DB	450	0.25	20	RT	o.n.	
Z907	7	Fabregat-Santiago2009			-			0.128		9.1	860	0.51	4						FTO 1	10		TiO ₂	1.8	100		20							
2907	5	Ling2009					+												FIO 1	15				100	SPD-O2		SP	500 (450)	0.5	20 (20)	60	6	
K51	29	Snaith2006a					+	0.16											FIO 1	15 O ₂ -pl.(20	:0)	7.0		100	SPD-O2		DB	500	0.5	20	RI	6	
K68	30	Snaith2008					+												FIO 1	15	0.000	1102		100	SPD		1						TO (0
K68	3	Unen2009b					+	0.05		5.7	896.7	0.761	3.88						FIO	Ac, Hel.,	., Et, UV-O ₃	1102		100	SPD	30	DB	500 (450)	0.5	20	RI	12	1102 from Showa
N/19	10	Howie2007					-	0.25					1						FIO 1	15		11O ₂	2-3	yes	SPD	9	-	550					
D21L6	10	riuwie2007 Vum2000	2 705 .04	151		0.091/100 1010	1.251/100 111	-	00.52.9/	0.64	709	0.57	1 4 44	64	460					-		TiO.	17			20	+ +						
U21L0	33	This work	J.70⊑+04	450	net.	0.80 V VS.INHE	-1.35V VS.NH	0.07	ad.52 % sun	9.04	/90	0.57	4.44	54	400		7	والمركبة المرام مرطق	570	0. 0			1.7	05	AL D	20	00	500	0				1 h - 1 50000 i= 00
1	-	This work	45.05	499	TUE	5.2 (Logs)	2.2 (1.997.)	0.07	100 mW/cm²	2.13 (1.43 at -1 V)	270	0.12	0.008			0000000	7 moi	the old, kink	FTO	10 Deconex	x, Et, 11 500 °C	TiO.	Ca. 3	25	ALD	13	DB	500	2	50	90	2	+ 1 h at 500 °C in O2
		THE WUR	40+00	432	Inc	-3.2 (J-agg.)	-5.2 (J-899.)	0.07	nou mw/cifie 1	.00 (0.54 at -1 V)	3/0	0.20	0.006			coarse-p	orous cell, 7 mol	ILIIS UIU, NITK	FIU	Deconex	ix, Et, 111 500 °C		Ca. 3	25	ALU	ca. 200	UD	000	-	50	00	3	+ mat 500 °C m O2
U5	8	Hagperg2008					+		99 % sun	6.31	865	0.57	3.11			90	60 1000		FIO 1	15 Hel, Ac,	, Et	1102	1.7	100	SPD	20	DB	500	0.5	20		0.N.	annealed in O2
U/	8	Hagperg2008					-		99 % sun	5.02	785	0.71	2.79			90	60 1000		FIO 1	15 Hel, Ac,	, Et	1102	1.7	100	SPD	20	DB	500	0.5	20		0.N.	annealed in O2
Date	8	Hagberg2008			1	1	+		99 % sun	1./2	/56	0.56	3.25			90	60 1000		FIO 1	15 Hel, Ac,	. 1	TIO ₂	1.7	100	SPD	20	DB	500	0.5	20		0.N.	annealed in O2
011	8	naguerg2008			+	1	+		99 % sun	5.85	811	0.63	3.01	40.50	400 500	90	60 1000		FIU	ID Hel, AC,		TIO2	1.7	100	SPD	20	DB	500	0.5	20		0.N.	annealed in U ₂
0001	8	naguerg2008	4.105.04	51	- Harrison	1.0	(0.70) . 0	OT IN ANUE	9.2 % SUN	0.00	000	0.01	3.5	40-50	420-530				FIO 1	ib Hel, Ac,	. = 1	TIO2	1.7	100	SPD	20	DB	500	0.5	20		0.N.	annealed in U ₂
7007	32	Wang2000 Eabroast Santiage2000	4.12E+04	514	chiorotorm	1.0 VS. NHE	(-0.76)> -0.	or vs. with	TOO INW/CM*	9.06	060	0.61	4.8						FIO			1102	1.7	yes	570	20	DB	000		20		U.N.	alter 11014: 450°C
6.001	14	i abiegar-banu8002009			1																					1							

Abbreviations of methods:

acetic acid application compressed doctor bladed detergent dispergent ethanol ethyl cellulose evaporated Helmanex detergent RT SC SP

SPD SPD-O2

sput. TCO

th. terp. UB UV-O₃

room temperature spin coated screen printing

spray pyrolysis deposition SPD with O₂ as carrier gas

SPD with Q₂ as carrier years sputtered transparent conductive oxide thickness terpineol ultrasonic bath UV-ozone

- ionic liquid methanol over night
- AA appl. CP DB det. disp. Et. EC evap. Hel. IL Me. o. n. O₂ O₂-pl. in O2 atmosphere
- O₂-plasma

Abbreviations of compounds:

- Aborevations of compounds: AN associationalis AZO Al.ZAO bmii buhymethyl imidazolum iodide BN Benzonitile BNN tetrabuhyl-ammonium CB Chlorobanzene D102 indoline dye D149 indoline dye D149 indoline dye D149 indoline dye MIB(CN), 1 = Harly-Sametyl-midiazolium iodide dmii 1.3-dimethyl-3-midiya-midiacolium tetrady MIB(CN), 1 = Harly-Sametyl-midiazolium iodide emii 1 = Harly-Sametyl-midiazolium tetrady GBA 4-guanidinouthylin add from Filka GUNOS ou cuadinium titocamate fab

- GuNCS guanidinium thiocyanate (gtc)

- hexachloroplatinic acid hexadecylmalonic acid Sn:In₂O₃
- H2PtCl6 HDMA ITO
- J-agg. K68
- Sinin,O,S, -Jaggregate Ru-thiocyanato-bipyridyl complex Lithium triflicornethanesulfonate N-methy-N-budy limidscallum iddle In-methoxy-2-compacil to the standard standard standard Ru-thocyanato-bipyridyl complex Ru-thocyanato-bipyridyl complex
- K68 Li triflate mbii MP MPN N3 N621 N719 N749
- NBB
- NKX-2311 Coumarine dye

NMBI PEG

t-butanol TBAI tBP TFSI-Li THF

VN Z-907 ZnPor

N-Methylbenzimidazole Polyethylene giycol 1 - propyl-3methylimidazolium iodide (tris (4-bromophenyljammoniumyl hexachloroantimonate 22,7,7-tettaks (N. A. d. - p-mitosyphenyl-amine)3,9-spirobitluorene pmii Sb dopant Spiro-MeOTAD

terr-Butanol Tetrabutylammonium iodide 4TBP, 4-terr-Butylpyridine Bis(trifluoromethane)sulfonimide lithium salt tetrahydrofuran

1/2

- valeronitril Ru-thiocyanato-bipyridyl complex
- Zinc porphyrin

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Dye						T	1		lodine (ls)	Spiro-MeOTAD	Lil/M	TESI-Li	TESI-Li	tBP / M	tBP	I I		T T				<u>г т</u>					
dve-conc. / mM	solvent	time/h	temp./°C	comment	solvent 1	Vol%	solvent	2 Vol%	/ M	/ M	/ En/m	/ mM	/ mol-% spiro.	(01 / 11	/ mol-% spiro.	Add, 1	conc. / M	Add. 2	conc. / M	sealant	cathode	appl.	th./nm	comment			
0.3 + 0.075	AN:t-butanol 1:1				MPN	100			0.1							pmii	0.6	NMBI	0.45	Bynel hot melt ring, 3	5 um thick			heating posttreatment at 55 °C for 4 h. electrolyte filled in with vacuum, hole drilled by sand blasting			
0.3	AN:t-butanol 1:1	12	BT		MPN	100			0.1							pmii	0.6	NMBI	0.45	Bynel hot melt ring 3	5 um thick			heating posttreatment at 55 °C for 4 h, electrolyte filled in with vacuum, hole drilled by sand blasting			
																				35 um thick Bynel rin	Pt-FTO	0.005 M her	0.005 M hexachipronizina additi is sononana at 400 C for 15 min				
																				35 µm thick Bynel rin	Pt-FTO	0.005 M hex	achloropl	atinic acid in isopropanol at 400 C for 15 min			
																				35 µm thick Bynel rin	Pt-FTO	0.005 M hex	achloropl	atinic acid in isopropanol at 400 C for 15 min			
0.3	AN:t-butanol 1:1	20-24	RT		MPN	100			0.1							dmpii	0.8	NMBI	0.5	25 µm Surlyn 1702	Pt-FTO	H2PtCl6 in	ethanol (2	hole drilled by sand blaster, then cleaned with water in USB, aceton and 0.1 M HCI-aq, after Pt application: 400 °C 15 min			
					AN	85	VN	15	0.03					0.5		mbii	0.6	GuNCS	0.1	Surlyn 1702	Pt-FTO	H2PtCI6 SC					
					AN	85	VN	15	0.03					0.5		mbii	0.6	GuNCS	0.1	Surlyn 1702	Pt-FTO						
0.5	AN:t-butanol 1:1	24			AN	85	VN	15	0.03					0.5		mbii	0.6	GuNCS	0.1	Surlyn 1702	Pt-FTO						
0.3	AN:t-butanol 1:1	20-24	RT		MPN	100			0.1							dmpii	0.8	NMBI	0.5	25 µm Surlyn 1702	Pt-FTO	H2PtCl6 in	ethanol (2	hole drilled by sand blaster, then cleaned with water in USB, aceton and 0.1 M HCI-aq, after Pt application: 400 °C 15 min			
0.5	ethanol	12	RT		MPN	100			0.05		0.7			0.055													
0.5	ethanol	12	BT		MPN	100			0.05		0.7			0.5													
0.3	ethanol	1.5	60		MPN	100			0.05		0.1			1		dmpii	0.6										
0.5	ethanol	0.5	0	desorption in 10 mM KOH	H MPN	100			0.05		0.5			0.5						Surlyn	Pt-FTO						
0.3	ethanol	3	80 1	h excess-dye desorption																							
0.3	AN:t-butanol 1:1	18	07		AN	100	101	50	0.05		0.1			0.5		dmpii	0.6				0. 57.0						
0.3	AN:r-butanoi 1:1	20	RI	incod with AN	AN	100	VN	50	0.05		0.1			0.5		TRA	0.6			Surlup 1479	Pt-FTO	sputtered					
0.5	AN.(*Outdriot 1.1	0. 11.		Insed with An	AN	100			0.05		(0.1)			0.5		omii	0.6	(GuNCS)	(0.1)	Sunyii 1472	TELLO			Evamination the effect of TiCl, treatment			
0.5	AN:t-butanol 1:1	17			MDN	100			0.05		0.1			0.6		dmii	0.6	(00,000)	(0.1)		D+ Ti			Examination the ender of most beamining			
0.5	AN:t-butanol 1:1	17			MDN	100			0.05		0.1			0.0		dmii	0.5				D+ Ti						
0.5	Auto buttanor 1.1	17			MDN	100		-	0.05		0.1					dinii	0.5				PETI						
0.0	athered	15	DT		IVIP'IN	100	101	15	0.05		0.005			0.00		anni	0.5	0.4100	0.05		Pt-11						
0.3	ethanoi	15	ni or		AIN	65	VIN	15	0.04		0.025			0.28		mbii	0.0	GUIVCS	0.05	0 1 1700 05 5	D: 570						
0.3	ethanol+10 mM Cl	4	RI		AN	85	VN	15	0.04		0.025			0.28		mbii	0.6	GUNCS	0.05	Suriyn 1702, 25µm L	Pt-FTO			Sealant Bynei used to close the noie, antireflection and UV-cut off-film was attached: ARKTOP from Asani Glass			
0.3	ethanol+10 mM Cl	4	RI		AN	85	VN	15	0.04		0.025			0.28		mbii	0.6	GuNCS	0.05	Surlyn 1702, 25µm L	Pt-FTO						
0.3	ethanol+10 mM Cl	4	RI		AN	85	VN	15	0.04		0.025			0.28		mbii	0.6	GuNCS	0.05	Surlyn 1702, 25µm L	Pt-FTO						
0.3	ethanol+10 mM Ci	4	RT		AN	85	VN	15	0.04		0.025			0.28		mbii	0.6	GuNCS	0.05	Surlyn 1702, 25µm D	Pt-FTO						
0.3	ethanol+10 mM Cl	4	RT		AN	85	VN	15	0.04		0.025			0.28		mbii	0.6	GuNCS	0.05	Surlyn 1702, 25µm D	Pt-FTO						
0.5	AN:t-butanol 1:1	4	RT		AN	85	VN	15	0.05		0.1			0.05		bmii	0.6			Bynel, 35 µm	Pt-FTO						
0.3	sat. acid in CB	5	RT		AN	85	VN	15	0.03		0.05			0.5		dmii	1			25 µm Surlyn	Pt-FTO			hole drilling by an ultrafine sandblaster, vacuum backfilling, Bynel for hole sealing			
0.2	ethanol	2																			Pt-FTO			0.05 M hexachloroplatinic acid			
					pmii	65	EMIB(CN))4 35	0.2							NBB	0.5	GuNCS	0.1								
0.3	sat. acid in CB	5	RT						1.67%							mixture of: dmi	i, emii, EMI	B(CN)4, NBB,	GuNCS	25 µm Surlyn	Pt-FTO			hole drilling by an ultrafine sandblaster, vacuum backfilling, Bynel for hole sealing			
								-		0.47		50					0.005.04										
	AN A				CB	95	AN	5		0.17		50	29.4		105.00	Sb dopant	3.30E-04	AN	0.96		AU	evap.	semitrans	parent			
0.5	AN.7-DULANUE 1.1	8	RI		CB	100		_		0.17	-	0.26	0.2	0.18	105.88	Sb dopant	7.60E-04				Au			silver stripes to ennance current collection, sealed with glas and Surryn and Torr Seal			
0.5	AN:t-butanoi 1:1			Bu ₄ N, dcbpyH ₂	CB	100	_	_		0.1	_	27	27.0	0.11	110.00	Sb dopant	2.00E-04	VN	0.11		Au						
0.5	AN:7-DUtanoi 1:1	04	-	sliver nitrate (50 mol-% o		100		_		0.17	-	2/	27.0	0.11	110.00	Sb dopant	2.00E-04	VIN	0.11		AU						
	ethanoi	29		aterw. mised w. ethanol	CB CD	100		_		0.17		15	0.0	0.11	64.71	-	0.005.04	-			Au						
0.2	THE	o. n.			CB	100		-		0.17	Li triffate:	13	7.6	0.13	76.47	Sb dopant	3.00E-04				AU		30	Li trinate inst. Li sait			
0.2	THE	0. n.			CB	100		_		0.17	Li trifiate:	13	7.6	0.13	/6.4/	Sb dopant	3.00E-04				Au		30				
0.5	AN.7-DULANUE 1.1	1			CB	100		_			-	yes		yes		Sb dopant	yes				Au	evap.	30	I min penetration of spiro-solution, oned for so min in Al-now and evacuated at ~5x10 inder			
0.3	ANIX-DUTANOI 1:1					+				yes		yes		yes		Sb dopant	yes				Au	evap.	30				
0.3	AN:7-DUTANOI 1:1			silver nitrate						yes		yes		yes		Sb dopant					Au	evap.	30				
0.3	AN:t-butanol 1:1		RÍ		CB	100				0.17		13	7.6	0.13	76.47	Sb dopant	3.00E-04	1 1			Au	evap.	30				
					СВ	100				0.17	-	13	7.6	0.11	64.71						Au						
6	GBA : MP 1:1	10 min	RI	insed with AN	CB	100	(AN)	(1.5)			_	8.7		0.047							Au	evap.	100				
0.3	AN:r-butanoi 1:1				CB	100	(AN)	(2.6)		0.15		21.9	14.6	0.12	80.00	Sb dopant	8.60E-03	AN	0.50		Au	evap.	30	evap. at 10 mbar			
0.5	AN:7-DUTANOI 1:1				CB	100	(AN)	(1.5)		0.15		8.7	5.8	0.047	31.33			AN	0.29		Au		30				
					CB	100				0.17		19.5	11.5	0.12	70.59						Au	evap.	30				
1	AN:t-butanol 1:1	12	RT		CB	100	1			0.18		0.21	0.1	0.11	61.11	Sb dopant	2.60E-04			1	Au						
						-		_						-													
0.3	ethanol	15	RT		CB	100	1	-		yes	1	yes		ļ	L			L		1	Au		50				
0.5	AN:t-butanol 1:1	2h	60 r	insed with AN:t-butanol	CB	100	(AN)	(2.2)		0.17		13	7.6	0.12	80.00	-		AN	0.42		Au	sputtered	50	7 months old ss-DSSC (slight degradation) with kink in I-V curve			
0.1 (100 µl)	THF	sprayed	RT (110)	heptane post-treatmen	t CB	100	(AN)	(2.2)		0.17		13	7.6	0.12	80.00	-	-	AN	0.42		Au	sputtered	50	7 months old coarse-porous dye aggregate solar cell (DASC) with kink in I-V curve, n-heptane treatment: 4 h at 110 °C			
		6	r	insed with AN	CB	100						yes		yes							Au		50	Spiro spincoating like Snaith&Grätzel06_2			
		6	r	insed with AN	CB	100						yes		yes							Au		50	Spiro spincoating like Snaith&Grätzel06_2			
		6	r	insed with AN	CB	100				2.55		yes		yes							Au		50	Spiro spincoating like Snaith&Grätzel06_2			
		6	r	insed with AN	CB	100	1				1	yes		yes							Au		50	Spiro spincoating like Snaith&Grätzel06 2			
		6	i i	insed with AN	CB	100	1	1				ves		ves		1				1	Au		50	Spiro spincoating like Snaith&Grätzel06 2			
0.3	sat, acid in CB	5	BT		CB	100	1	1		0.17		0.21	0.1	0.00011 ?	0.06			1 1		1	Au		50	Spiro spincoating after 1 min, of penetrating			
						1	1	1		0.17	1	13	7.6	0.11	64 71			1		1							

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2/2