Fernando Langa

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#	Paper	IF	Citations
449	Infrared photocurrent spectral response from plastic solar cell with low-band-gap polyfluorene and fullerene derivative. <i>Applied Physics Letters</i> , 2004 , 85, 5081-5083	3.4	193
448	Synthesis, photochemistry, and electrochemistry of single-wall carbon nanotubes with pendent pyridyl groups and of their metal complexes with zinc porphyrin. Comparison with pyridyl-bearing fullerenes. <i>Journal of the American Chemical Society</i> , 2006 , 128, 6626-35	16.4	189
447	Microwave irradiation: more than just a method for accelerating reactions. <i>Contemporary Organic Synthesis</i> , 1997 , 4, 373-386		186
446	A Simple and Effective Modification of PCBM for Use as an Electron Acceptor in Efficient Bulk Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2011 , 21, 746-755	15.6	135
445	Microwave-assisted sidewall functionalization of single-wall carbon nanotubes by Diels-Alder cycloaddition. <i>Chemical Communications</i> , 2004 , 1734-5	5.8	131
444	Geminate charge recombination in polymer/fullerene bulk heterojunction films and implications for solar cell function. <i>Journal of the American Chemical Society</i> , 2010 , 132, 12440-51	16.4	120
443	The importance of various anchoring groups attached on porphyrins as potential dyes for DSSC applications. <i>RSC Advances</i> , 2014 , 4, 21379-21404	3.7	113
442	Sidewall Functionalization of Single-Walled Carbon Nanotubes with Nitrile Imines. Electron Transfer from the Substituent to the Carbon Nanotube. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 126	59 7:1 26	9710
441	Synthesis of diketopyrrolopyrrole containing copolymers: a study of their optical and photovoltaic properties. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 3095-103	3.4	109
440	A Novel Alternating Phenylenevinylene Copolymer with Perylene Bisimide Units: Synthesis, Photophysical, Electrochemical, and Photovoltaic Properties. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 7904-7912	3.8	92
439	Efficient bulk heterojunction devices based on phenylenevinylene small molecule and perylenepyrene bisimide. <i>Journal of Materials Chemistry</i> , 2010 , 20, 561-567		89
438	Design, Synthesis and Properties of Low Band Gap Polyfluorenes for Photovoltaic Devices. <i>Synthetic Metals</i> , 2005 , 154, 53-56	3.6	87
437	Photoinduced processes in fullerenopyrrolidine and fullerenopyrazoline derivatives substituted with an oligophenylenevinylene moiety. <i>Journal of Materials Chemistry</i> , 2002 , 12, 2077-2087		86
436	Modification of regioselectivity in cycloadditions to C70 under microwave irradiation. <i>Journal of Organic Chemistry</i> , 2000 , 65, 2499-507	4.2	76
435	Investigations of materials and device structures for organic semiconductor solar cells. <i>Optical Engineering</i> , 1993 , 32, 1921	1.1	74
434	Photophysical, electrochemical and photovoltaic properties of dye sensitized solar cells using a series of pyridyl functionalized porphyrin dyes. <i>RSC Advances</i> , 2012 , 2, 12899	3.7	70
433	Cycloadditions to [60]fullerene using microwave irradiation: A convenient and expeditious procedure. <i>Tetrahedron</i> , 1997 , 53, 2599-2608	2.4	68

432	Efficient tautomerization hydrazone-azomethine imine under microwave irradiation. Synthesis of [4,3?] and [5,3?]bipyrazoles. <i>Tetrahedron</i> , 1998 , 54, 13167-13180	2.4	67	
431	Silica gel catalysed Knoevenagel condensation in dry media under microwave irradiation. <i>Tetrahedron Letters</i> , 1996 , 37, 1113-1116	2	67	
430	Unsymmetrical Donor-Acceptor-Acceptor-Donor Type Benzothiadiazole-Based Small Molecule for a Solution Processed Bulk Heterojunction Organic Solar Cell. <i>ACS Applied Materials & Document Color</i> , 10283-92	9.5	65	
429	Microwave Assisted Beckmann Rearrangement of Ketoximes in Dry Media. <i>Synlett</i> , 1995 , 1995, 1259-12	2 <u>60</u> 2	65	
428	Low band gap dyes based on 2-styryl-5-phenylazo-pyrrole: Synthesis and application for efficient dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2011 , 196, 4152-4161	8.9	62	
427	Toward High-Performance Polymer Photovoltaic Devices for Low-Power Indoor Applications. <i>Solar Rrl</i> , 2017 , 1, 1700174	7.1	60	
426	The first synthesis of a conjugated hybrid of C60fullerene and a single-wall carbon nanotube. <i>Carbon</i> , 2007 , 45, 2250-2252	10.4	59	
425	Enhancement of power conversion efficiency of dye-sensitized solar cells by co-sensitization of zinc-porphyrin and thiocyanate-free ruthenium(II)-terpyridine dyes and graphene modified TiO2 photoanode. <i>RSC Advances</i> , 2013 , 3, 22412	3.7	58	
424	Cosensitization of dye sensitized solar cells with a thiocyanate free Ru dye and a metal free dye containing thienylfluorene conjugation. <i>RSC Advances</i> , 2013 , 3, 6036	3.7	58	
423	New Triphenylamine-Based Organic Dyes with Different Numbers of Anchoring Groups for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 5941-5950	3.8	58	
422	Dye sensitized solar cells (DSSCs) based on modified iron phthalocyanine nanostructured TiO2 electrode and PEDOT:PSS counter electrode. <i>Synthetic Metals</i> , 2009 , 159, 1325-1331	3.6	58	
421	Nanoscale interaction between CdSe or CdTe nanocrystals and molecular dyes fostering or hindering directional charge separation. <i>Small</i> , 2010 , 6, 221-5	11	58	
420	Electrical and photoelectrical properties of poly(phenyl azomethine furane) thin films devices. <i>Thin Solid Films</i> , 1996 , 278, 129-134	2.2	58	
419	Low band gap vinylene compounds with triphenylamine and benzothiadiazole segments for use in photovoltaic cells. <i>Organic Electronics</i> , 2009 , 10, 1320-1333	3.5	57	
418	Thermal and Microwave-Assisted Synthesis of DielsAlder Adducts of [60]Fullerene with 2,3-Pyrazinoquinodimethanes: Characterization and Electrochemical Properties. <i>Journal of Organic Chemistry</i> , 1997 , 62, 3705-3710	4.2	56	
417	Low band gap conjugated small molecules containing benzobisthiadiazole and thienothiadiazole central units: synthesis and application for bulk heterojunction solar cells. <i>Journal of Materials Chemistry</i> , 2011 , 21, 4679		54	
416	Synthesis and properties of isoxazolo[60]fullerene-donor dyads. <i>Journal of Organic Chemistry</i> , 2000 , 65, 8675-84	4.2	54	
415	C(60)-based triads with improved electron-acceptor properties: pyrazolylpyrazolino[60]fullerenes. <i>Journal of Organic Chemistry</i> , 2001 , 66, 5033-41	4.2	54	

414	Pyrazolinofullerenes: a less known type of highly versatile fullerene derivatives. <i>Chemical Society Reviews</i> , 2011 , 40, 5232-41	58.5	53
413	Low Open-Circuit Voltage Loss in Solution-Processed Small-Molecule Organic Solar Cells. <i>ACS Energy Letters</i> , 2016 , 1, 302-308	20.1	52
412	New conjugated alternating benzodithiophene-containing copolymers with different acceptor units: synthesis and photovoltaic application. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 155-171	13	52
411	Synthesis, electrochemistry and photophysical properties of phenylenevinylene fullerodendrimers. <i>Tetrahedron Letters</i> , 2001 , 42, 3435-3438	2	52
410	Microwave irradiation in solvent-free conditions: an eco-friendly methodology to prepare indazoles, pyrazolopyridines and bipyrazoles by cycloaddition reactions. <i>Green Chemistry</i> , 2000 , 2, 165-1	72	52
409	CH3NH3PbI3 Perovskite Sensitized Solar Cells Using a D-A Copolymer as Hole Transport Material. <i>Electrochimica Acta</i> , 2015 , 151, 21-26	6.7	50
408	1,1,4,4-Tetracyanobuta-1,3-diene Substituted Diketopyrrolopyrroles: An Acceptor for Solution Processable Organic Bulk Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 6324-63	335 ⁸	50
407	Effect of counter electrode, thickness and sintering temperature of TiO2 electrode and TBP addition in electrolyte on photovoltaic performance of dye sensitized solar cell using pyronine G (PYR) dye. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009 , 206, 53-63	4.7	50
406	Polymer solar cells with low-bandgap polymers blended with C70-derivative give photocurrent at 1 fh. <i>Thin Solid Films</i> , 2006 , 511-512, 576-580	2.2	50
405	Efficient sensitization of dye-sensitized solar cells by novel triazine-bridged porphyrin-porphyrin dyads. <i>Inorganic Chemistry</i> , 2013 , 52, 9813-25	5.1	49
404	Novel Low Band Gap Small Molecule and Phenylenevinylene Copolymer with Cyanovinylene 4-Nitrophenyl Segments: Synthesis and Application for Efficient Bulk Heterojunction Solar Cells. <i>ACS Applied Materials & Discrete Sense</i> , 2010, 2, 270-278	9.5	49
403	A new porphyrin bearing a pyridinylethynyl group as sensitizer for dye sensitized solar cells. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2013 , 253, 88-96	4.7	48
402	Dendritic liquid-crystalline fullereneferrocene dyads. <i>Tetrahedron</i> , 2006 , 62, 2115-2122	2.4	48
401	Synthesis and photochemistry of soluble, pentyl ester-modified single wall carbon nanotube. <i>Chemical Physics Letters</i> , 2004 , 386, 342-345	2.5	48
400	Bulk heterojunction organic solar cells based on carbazole-BODIPY conjugate small molecules as donors with high open circuit voltage. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 26580-8	3.6	47
399	Effect of surface modification of TiO2 on the photovoltaic performance of the quasi solid state dye sensitized solar cells using a benzothiadiazole-based dye. <i>Journal of Power Sources</i> , 2010 , 195, 3011-301	1 <mark>8</mark> .9	47
398	Electrical, optical and photovoltaic effect in pyronine G (Y) based thin film sandwich devices. <i>Thin Solid Films</i> , 1998 , 333, 176-184	2.2	47
397	Liquid-crystalline [60]fullerene-TTF dyads. <i>Organic Letters</i> , 2005 , 7, 383-6	6.2	47

(2010-2017)

396	Porphyrins and BODIPY as Building Blocks for Efficient Donor Materials in Bulk Heterojunction Solar Cells. <i>Solar Rrl</i> , 2017 , 1, 1700127	7.1	46	
395	Triazine-Bridged Porphyrin Triad as Electron Donor for Solution-Processed Bulk Hetero-Junction Organic Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 5968-5977	3.8	45	
394	On the thermal stability of [60]fullerene cycloadducts: retro-cycloaddition reaction of 2-pyrazolino[4,5:1,2][60]fullerenes. <i>Journal of Organic Chemistry</i> , 2008 , 73, 3184-8	4.2	45	
393	Synthesis and properties of pyrazolino[60]fullerene-donor systems. <i>Tetrahedron</i> , 2002 , 58, 5821-5826	2.4	45	
392	The isoindazole nucleus as a donor in fullerene-based dyads. Evidence for electron transfer. <i>Journal of Organic Chemistry</i> , 2004 , 69, 2661-8	4.2	45	
391	Pyrazolino[60]fullerene-oligophenylenevinylene dumbbell-shaped arrays: synthesis, electrochemistry, photophysics, and self-assembly on surfaces. <i>Chemistry - A European Journal</i> , 2005 , 11, 4405-15	4.8	45	
390	Synthesis of new C60?donor dyads by reaction of pyrazolylhydrazones with [60]fullerene under microwave irradiation. <i>Tetrahedron Letters</i> , 1999 , 40, 1587-1590	2	45	
389	Effect of ethylene carbonate as a plasticizer on CuI/PVA nanocomposite: Structure, optical and electrical properties. <i>Journal of Advanced Research</i> , 2014 , 5, 79-86	13	44	
388	A new family of A2B2 type porphyrin derivatives: synthesis, physicochemical characterization and their application in dye-sensitized solar cells. <i>Journal of Materials Chemistry</i> , 2012 , 22, 8092		44	
387	Quasi solid state dye sensitized solar cells employing a polymer electrolyte and xanthene dyes. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2009 , 162, 32-39	3.1	44	
386	Synthesis, photophysics of two new perylene bisimides and their photovoltaic performances in quasi solid state dye sensitized solar cells. <i>Journal of Power Sources</i> , 2009 , 194, 1171-1179	8.9	43	
385	Solvent-free phase transfer catalysis under microwaves in fullerene chemistry. A convenient preparation of N-alkylpyrrolidino[60]fullerenes. <i>Tetrahedron Letters</i> , 1998 , 39, 6053-6056	2	43	
384	Small molecule carbazole-based diketopyrrolopyrroles with tetracyanobutadiene acceptor unit as a non-fullerene acceptor for bulk heterojunction organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 3311-3319	13	42	
383	Comparative study on the photovoltaic characteristics of ADA and DAD molecules based on Zn-porphyrin; a DAD molecule with over 8.0% efficiency. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 1057-1065	13	42	
382	Synthesis, optical and electrochemical properties of the A-ED-EA porphyrin and its application as an electron donor in efficient solution processed bulk heterojunction solar cells. <i>Nanoscale</i> , 2015 , 7, 17	9783	42	
381	Carbon nanohorns as a scaffold for the construction of disposable electrochemical immunosensing platforms. Application to the determination of fibrinogen in human plasma and urine. <i>Analytical Chemistry</i> , 2014 , 86, 7749-56	7.8	42	
380	Diketopyrrolopyrrole-Based Donor Acceptor Copolymers as Organic Sensitizers for Dye Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 3287-3291	3.8	42	
379	A carbon nanohorn-porphyrin supramolecular assembly for photoinduced electron-transfer processes. <i>Chemistry - A European Journal</i> , 2010 , 16, 10752-63	4.8	42	

378	Stoichiometry dependence of charge transport in polymer/methanofullerene and polymer/C70 derivative based solar cells. <i>Organic Electronics</i> , 2006 , 7, 195-204	3.5	42
377	A Propeller-Shaped, Triazine-Linked Porphyrin Triad as Efficient Sensitizer for Dye-Sensitized Solar Cells. <i>European Journal of Inorganic Chemistry</i> , 2014 , 2014, 1020-1033	2.3	41
376	Grafted-double walled carbon nanotubes as electrochemical platforms for immobilization of antibodies using a metallic-complex chelating polymer: Application to the determination of adiponectin cytokine in serum. <i>Biosensors and Bioelectronics</i> , 2015 , 74, 24-9	11.8	40
375	ADA based porphyrin for solution processed small molecule bulk heterojunction solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 16287-16301	13	40
374	High effectiveness of oligothienylenevinylene as molecular wires in Zn-porphyrin and C60 connected systems. <i>Chemical Communications</i> , 2007 , 4498-500	5.8	40
373	Synthesis, optical and electrochemical properties of new ferrocenyl substituted triphenylamine based donor dyes for dye sensitized solar cells. <i>RSC Advances</i> , 2014 , 4, 34904-34911	3.7	39
372	Co-sensitization of amphiphilic ruthenium (II) sensitizer with a metal free organic dye: Improved photovoltaic performance of dye sensitized solar cells. <i>Organic Electronics</i> , 2013 , 14, 1237-1241	3.5	39
371	Efficient Polymer Solar Cells with High Open-Circuit Voltage Containing Diketopyrrolopyrrole-Based Non-Fullerene Acceptor Core End-Capped with Rhodanine Units. <i>ACS Applied Materials & Diverfaces</i> , 2017 , 9, 11739-11748	9.5	38
370	Role of the bridge in photoinduced electron transfer in porphyrin-fullerene dyads. <i>Chemistry - A European Journal</i> , 2015 , 21, 5814-25	4.8	38
369	BcorpionEshaped mono(carboxy)porphyrin-(BODIPY)2, a novel triazine bridged triad: synthesis, characterization and dye sensitized solar cell (DSSC) applications. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 5652-5664	7.1	38
368	A non-fullerene all small molecule solar cell constructed with a diketopyrrolopyrrole-based acceptor having a power conversion efficiency higher than 9% and an energy loss of 0.54 eV. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 11714-11724	13	38
367	Endohedral and exohedral hybrids involving fullerenes and carbon nanotubes. <i>Nanoscale</i> , 2012 , 4, 4370)- 9 .1 ₇	38
366	Synthesis of a perylene bisimide with acetonaphthopyrazine dicarbonitrile terminal moieties for photovoltaic applications. <i>Synthetic Metals</i> , 2010 , 160, 932-938	3.6	38
365	Cycloaddition of benzyne to SWCNT: towards CNT-based paddle wheels. <i>Chemical Communications</i> , 2010 , 46, 7028-30	5.8	38
364	Novel zinc porphyrin with phenylenevinylene meso-substituents: Synthesis and application in dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2011 , 196, 6622-6628	8.9	38
363	Effect of the incorporation of a low-band-gap small molecule in a conjugated vinylene copolymer: PCBM blend for organic photovoltaic devices. <i>ACS Applied Materials & Description of Applied M</i>	9.5	38
362	Electroactive 3?-(N-phenylpyrazolyl)isoxazoline[4?,5?:1,2][60]fullerene dyads. <i>Tetrahedron Letters</i> , 1999 , 40, 4889-4892	2	38
361	Influence of iodine on the electrical and photoelectrical properties of zinc phthalocyanine thin film devices. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1996 , 41, 222-227	3.1	38

360	CuSCN as selective contact in solution-processed small-molecule organic solar cells leads to over 7% efficient porphyrin-based device. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11009-11022	13	37
359	Stepwise co-sensitization as a useful tool for enhancement of power conversion efficiency of dye-sensitized solar cells: The case of an unsymmetrical porphyrin dyad and a metal-free organic dye. <i>Organic Electronics</i> , 2014 , 15, 1324-1337	3.5	36
358	Solution processed bulk heterojunction polymer solar cells with low band gap DPP-CN small molecule sensitizer. <i>Organic Electronics</i> , 2012 , 13, 1756-1762	3.5	36
357	BODIPYdiketopyrrolopyrroleporphyrin conjugate small molecules for use in bulk heterojunction solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 8449-8461	13	35
356	An ADA small molecule based on the 3,6-dithienylcarbazole electron donor (D) unit and nitrophenyl acrylonitrile electron acceptor (A) units for solution processed organic solar cells. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 2297-2306	13	35
355	Novel p-phenylenevinylene compounds containing thiophene or anthracene moieties and cyano-vinylene bonds for photovoltaic applications. <i>ACS Applied Materials & District Compounds (Compound)</i> , 1, 171	<u>9-</u> §	35
354	(D-EA)-ED-A type ferrocenyl bisthiazole linked triphenylamine based molecular systems for DSSC: synthesis, experimental and theoretical performance studies. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 8925-8933	3.6	34
353	Ferrocene-diketopyrrolopyrrole based non-fullerene acceptors for bulk heterojunction polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 13625-13633	13	34
352	Electrical and photoelectrical properties of Schottky barrier devices using the chloro aluminium phthalocyanines. <i>Synthetic Metals</i> , 1995 , 74, 227-234	3.6	34
351	Efficient co-sensitization of dye-sensitized solar cells by novel porphyrin/triazine dye and tertiary aryl-amine organic dye. <i>Organic Electronics</i> , 2015 , 25, 295-307	3.5	33
350	Synthesis of a Modified PC70BM and Its Application as an Electron Acceptor with Poly(3-hexylthiophene) as an Electron Donor for Efficient Bulk Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2012 , 22, 4087-4095	15.6	33
349	Enhanced Performance of Bulk Heterojunction Solar Cells Using Novel Alternating Phenylenevinylene Copolymers of Low Band Gap with Cyanovinylene 4-Nitrophenyls. <i>Macromolecules</i> , 2010 , 43, 5544-5553	5.5	33
348	New photosensitizer with phenylenebisthiophene central unit and cyanovinylene 4-nitrophenyl terminal units for dye-sensitized solar cells. <i>Electrochimica Acta</i> , 2011 , 56, 5616-5623	6.7	33
347	Bandgap modulation in efficient n-thiophene absorbers for dye solar cell sensitization. <i>ChemPhysChem</i> , 2010 , 11, 245-50	3.2	33
346	Synthesis and photoinduced intramolecular processes of fulleropyrrolidine-oligothienylenevinylene-ferrocene triads. <i>Chemistry - A European Journal</i> , 2007 , 13, 3924-33	4.8	33
345	Microwave irradiation: an important tool to functionalize fullerenes and carbon nanotubes. <i>Combinatorial Chemistry and High Throughput Screening</i> , 2007 , 10, 766-82	1.3	33
344	Charge conduction mechanism and photovoltaic properties of 1,2-diazoamino diphenyl ethane (DDE) based schottky device. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2003 , 104, 15-25	3.1	33
343	Unprecedented low energy losses in organic solar cells with high external quantum efficiencies by employing non-fullerene electron acceptors. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 14887-14897	13	32

342	Solvent Annealing Control of Bulk Heterojunction Organic Solar Cells with 6.6% Efficiency Based on a Benzodithiophene Donor Core and Dicyano Acceptor Units. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 20871-20879	3.8	32
341	Delocalization-to-localization charge transition in diferrocenyl-oligothienylene-vinylene molecular wires as a function of the size by Raman spectroscopy. <i>Journal of the American Chemical Society</i> , 2012 , 134, 5675-81	16.4	31
340	Synthesis and characterization of a low band gap quinoxaline based DA copolymer and its application as a donor for bulk heterojunction polymer solar cells. <i>Polymer Chemistry</i> , 2013 , 4, 4033	4.9	31
339	Triplication of the photocurrent in dye solar cells by increasing the elongation of the Leonjugation in Zn-porphyrin sensitizers. <i>ChemPhysChem</i> , 2011 , 12, 961-5	3.2	31
338	Electron transfer in nonpolar solvents in fullerodendrimers with peripheral ferrocene units. <i>Chemistry - A European Journal</i> , 2006 , 12, 5149-57	4.8	31
337	New acceptorEporphyrinEcceptor systems for solution-processed small molecule organic solar cells. <i>Dyes and Pigments</i> , 2015 , 121, 109-117	4.6	30
336	Positional isomers of pyridine linked triphenylamine-based donor-acceptor organic dyes for efficient dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2016 , 126, 38-45	4.6	30
335	High open circuit voltage in efficient thiophene-based small molecule solution processed organic solar cells. <i>Organic Electronics</i> , 2013 , 14, 2826-2832	3.5	30
334	Novel Broadly Absorbing Sensitizers with Cyanovinylene 4-Nitrophenyl Segments and Various Anchoring Groups: Synthesis and Application for High-Efficiency Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 12355-12363	3.8	30
333	Synthesis of dumbbell-shaped bis-(pyrazolino[60]fullerene)-oligophenylenevinylene derivatives. <i>Tetrahedron Letters</i> , 2002 , 43, 7507-7511	2	30
332	Diels-Alder cycloaddition of vinylpyrazoles. Synergy between microwave irradiation and solvent-free conditions. <i>Tetrahedron</i> , 1996 , 52, 9237-9248	2.4	30
331	"Spider"-shaped porphyrins with conjugated pyridyl anchoring groups as efficient sensitizers for dye-sensitized solar cells. <i>Inorganic Chemistry</i> , 2014 , 53, 11871-81	5.1	29
330	New soluble porphyrin bearing a pyridinylethynyl group as donor for bulk heterojunction solar cells. <i>Organic Electronics</i> , 2013 , 14, 1811-1819	3.5	29
329	Effect of solvent and subsequent thermal annealing on the performance of phenylenevinylene copolymer: PCBM solar cells. <i>ACS Applied Materials & amp; Interfaces</i> , 2010 , 2, 504-10	9.5	29
328	Charge stabilizing tris(triphenylamine)-zinc porphyrin-carbon nanotube hybrids: synthesis, characterization and excited state charge transfer studies. <i>Nanoscale</i> , 2017 , 9, 7551-7558	7.7	28
327	Tuning the optoelectronic properties for high-efficiency (>7.5%) all small molecule and fullerene-free solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 14259-14269	13	28
326	Synthesis of a Broadly Absorbing Modified PCBM and Application As Electron Acceptor with Poly(3-Hexylthiophene) As Electron Donor in Efficient Bulk Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 7806-7816	3.8	28
325	Synthesis of benzoselenadiazole-based small molecule and phenylenevinylene copolymer and their application for efficient bulk heterojunction solar cells. <i>Organic Electronics</i> , 2010 , 11, 311-321	3.5	28

(2011-2018)

324	Corrole-BODIPY Dyad as Small-Molecule Donor for Bulk Heterojunction Solar Cells. <i>ACS Applied Materials & Discourt & Discourt Materials & Discourt & Discourt & Discourt & Discou</i>	9.5	27
323	Characterization of PVA/CuI polymer composites as electron donor for photovoltaic application. <i>Optik</i> , 2013 , 124, 1624-1631	2.5	27
322	D-A-D-A-D push pull organic small molecules based on 5,10-dihydroindolo[3,2-b]indole (DINI) central core donor for solution processed bulk heterojunction solar cells. <i>Organic Electronics</i> , 2016 , 30, 122-130	3.5	26
321	(4 + 2) and (2 + 2) Cycloadditions of Benzyne to C60 and Zig-Zag Single-Walled Carbon Nanotubes: The Effect of the Curvature. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 1716-1726	3.8	26
320	A mono(carboxy)porphyrin-triazine-(bodipy)2 triad as a donor for bulk heterojunction organic solar cells. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 6209-6217	7.1	26
319	Donor Ecceptor Ecceptor based charge transfer chromophore as electron donors for solution processed small molecule organic bulk heterojunction solar cells. <i>Organic Electronics</i> , 2015 , 19, 76-82	3.5	26
318	Synthesis of new low band gap dyes with BF2\(\text{B}\)zopyrrole complex and their use for dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2010 , 195, 5391-5398	8.9	26
317	Charge transport and photocurrent generation in PPAT:ZnO bulk heterojunction photovoltaic devices. <i>Synthetic Metals</i> , 2008 , 158, 400-410	3.6	26
316	Synthesis and characterization of a new perylene bisimide (PBI) derivative and its application as electron acceptor for bulk heterojunction polymer solar cells. <i>Organic Electronics</i> , 2012 , 13, 3118-3129	3.5	25
315	Panchromatic push-pull chromophores based on triphenylamine as donors for molecular solar cells. <i>Organic Letters</i> , 2011 , 13, 5362-5	6.2	25
314	Electrical and impedance spectral characterisation of ITO/DAG/In device. <i>Synthetic Metals</i> , 2001 , 123, 189-196	3.6	25
313	Photoinduced electron transfer of zinc porphyrin-oligo(thienylenevinylene)-fullerene[60] triads; thienylenevinylenes as efficient molecular wires. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 2443-51	3.6	24
312	Effect of Incorporation of Squaraine Dye on the Photovoltaic Response of Bulk Heterojunction Solar Cells Based on P3HT:PC70BM Blend. <i>ACS Sustainable Chemistry and Engineering</i> , 2014 , 2, 1743-175	ξ ^{8.3}	24
311	Viologen-functionalized single-walled carbon nanotubes as carrier nanotags for electrochemical immunosensing. Application to TGF-II cytokine. <i>Biosensors and Bioelectronics</i> , 2017 , 98, 240-247	11.8	24
310	Synthesis of perylene monoimide derivative and its use for quasi-solid-state dye-sensitized solar cells based on bare and modified nano-crystalline ZnO photoelectrodes. <i>Energy and Environmental Science</i> , 2009 , 2, 1293	35.4	24
309	Porphyrin Antenna-Enriched BODIPY-Thiophene Copolymer for Efficient Solar Cells. <i>ACS Applied Materials & Description of the Computer Solar Cells and Cells </i>	9.5	23
308	A novel carbazolephenothiazine dyad small molecule as a non-fullerene electron acceptor for polymer bulk heterojunction solar cells. <i>RSC Advances</i> , 2014 , 4, 33279-33285	3.7	23
307	A soluble hybrid material combining carbon nanohorns and C60. <i>Chemical Communications</i> , 2011 , 47, 12771-3	5.8	23

306	Facial Selectivity in Cycloadditions of a Chiral Ketene Acetal under Microwave Irradiation in Solvent-Free Conditions. Configurational Assignment of the Cycloadducts by NOESY Experiments and Molecular Mechanics Calculations. <i>Journal of Organic Chemistry</i> , 1995 , 60, 4160-4166	4.2	23
305	Design and synthesis of new ultra-low band gap thiadiazoloquinoxaline-based polymers for near-infrared organic photovoltaic application. <i>RSC Advances</i> , 2016 , 6, 14893-14908	3.7	22
304	Efficient bulk heterojunction photovoltaic devices based on diketopyrrolopyrrole containing small molecule as donor and modified PCBM derivatives as electron acceptors. <i>Organic Electronics</i> , 2012 , 13, 652-666	3.5	22
303	Application of solution processable squaraine dyes as electron donors for organic bulk-heterojunction solar cells. <i>Photochemical and Photobiological Sciences</i> , 2013 , 12, 1688-99	4.2	22
302	Efficient cycloaddition of arynes to carbon nanotubes under microwave irradiation. <i>Carbon</i> , 2013 , 63, 140-148	10.4	22
301	Synthesis of a low-band-gap small molecule based on acenaphthoquinoxaline for efficient bulk heterojunction solar cells. <i>Langmuir</i> , 2010 , 26, 12909-16	4	22
300	Heck reaction on single-walled carbon nanotubes. Synthesis and photochemical properties of a wall functionalized SWNT-anthracene derivative. <i>Journal of Materials Chemistry</i> , 2008 , 18, 1592		22
299	Photovoltaic properties of Schottky device based on dye sensitized poly (3-phenyl azo methine thiophene) thin film. <i>Thin Solid Films</i> , 2004 , 468, 208-215	2.2	22
298	Effect of acceptor strength on optical, electrochemical and photovoltaic properties of phenothiazine-based small molecule for bulk heterojunction organic solar cells. <i>Dyes and Pigments</i> , 2018 , 149, 830-842	4.6	22
297	Effect of low fluence radiation on nanocomposite thin films of Cu nanoparticles embedded in fullerene C 60. <i>Vacuum</i> , 2017 , 142, 5-12	3.7	21
296	Operative Mechanism of Hole-Assisted Negative Charge Motion in Ground States of Radical-Anion Molecular Wires. <i>Journal of the American Chemical Society</i> , 2017 , 139, 686-692	16.4	21
295	Increase in efficiency on using selenophene instead of thiophene in Ebridges for D-EDPP-ED organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 11886-11894	13	21
294	Dithienopyrrole-benzodithiophene based donor materials for small molecular BHJSCs: Impact of side chain and annealing treatment on their photovoltaic properties. <i>Organic Electronics</i> , 2016 , 37, 312-	325	21
293	Efficiency improvement using bis(trifluoromethane) sulfonamide lithium salt as a chemical additive in porphyrin based organic solar cells. <i>Nanoscale</i> , 2016 , 8, 17953-17962	7.7	21
292	Photoinduced electron transfer in a carbon nanohorn 160 conjugate. Chemical Science, 2014, 5, 2072	9.4	21
291	Indole and triisopropyl phenyl as capping units for a diketopyrrolopyrrole (DPP) acceptor central unit: an efficient DAD type small molecule for organic solar cells. <i>RSC Advances</i> , 2014 , 4, 732-742	3.7	21
290	Effect of porphyrin loading on performance of dye sensitized solar cells based on iodide/tri-iodide and cobalt electrolytes. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 13640	13	21
289	Organic bulk heterojunction solar cells based on solution processable small molecules (AA) featuring 2-(4-nitrophenyl) acrylonitrile acceptors and phthalimide-based Elinkers. <i>Journal of Materials Chemistry</i> , 2012 , 22, 13986		21

288	Improvement in the power conversion efficiency of thiocyanate-free Ru(II) based dye sensitized solar cells by cosensitization with a metal-free dye. <i>Journal of Materials Chemistry</i> , 2012 , 22, 18788		21
287	Novel Low Band Gap Phenylenevinylene Copolymer with BF2Azopyrrole Complex Units: Synthesis and Use for Efficient Bulk Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 1520-1	5 2 7	21
286	Morphological changes in carbon nanohorns under stress: a combined Raman spectroscopy and TEM study. <i>RSC Advances</i> , 2016 , 6, 49543-49550	3.7	21
285	Pyrrolo[3,2-b]pyrrole as the Central Core of the Electron Donor for Solution-Processed Organic Solar Cells. <i>ChemPlusChem</i> , 2017 , 82, 1096-1104	2.8	20
284	Near-IR Absorbing D-A-D Zn-Porphyrin-Based Small-Molecule Donors for Organic Solar Cells with Low-Voltage Loss. <i>ACS Applied Materials & Donors (Solar Cells With Low-Voltage Loss)</i> 11, 7216-7225	9.5	20
283	New D-A-D-A-D push pull organic semiconductors with different benzo[1,2-b:4, 5-b?] dithiophene cores for solution processed bulk heterojunction solar cells. <i>Dyes and Pigments</i> , 2015 , 120, 126-135	4.6	20
282	Carbazole-based green and blue-BODIPY dyads and triads as donors for bulk heterojunction organic solar cells. <i>Dalton Transactions</i> , 2020 , 49, 5606-5617	4.3	20
281	Improved power conversion efficiency by insertion of RGOIIiO2 composite layer as optical spacer in polymer bulk heterojunction solar cells. <i>Organic Electronics</i> , 2014 , 15, 348-355	3.5	20
280	Photoinduced energy and electron transfer in phenylethynyl-bridged zinc porphyrin-oligothienylenevinylene-C60 ensembles. <i>Chemistry - A European Journal</i> , 2012 , 18, 7473-85	4.8	20
279	Triphenylamine- and benzothiadiazole-based dyes with multiple acceptors for application in dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2010 , 195, 3002-3010	8.9	20
278	Quasi solid state dye-sensitized solar cells with modified TiO2 photoelectrodes and triphenylamine-based dye. <i>Electrochimica Acta</i> , 2010 , 55, 2368-2372	6.7	20
277	Oxidation of 3-alkyl-substituted 2-pyrazolino[60]fullerenes: a new formyl-containing building block for fullerene chemistry. <i>Organic Letters</i> , 2008 , 10, 3705-8	6.2	20
276	The importance of the linking bridge in donor£160 electroactive dyads. <i>New Journal of Chemistry</i> , 2002 , 26, 76-80	3.6	20
275	Donor acceptor acceptor and one color solution processed bulk heterojunction solar cells. Organic Electronics, 2015, 27, 72-83	3.5	19
274	Synthesis and properties of low bandgap star molecules TPA-[DTS-PyBTTh3]3 and DMM-TPA[DTS-PyBTTh3]3 for solution-processed bulk heterojunction organic solar cells. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 8412-8422	7.1	19
273	Solution processed organic solar cells based on ADD?DA small molecule with benzo[1,2-b:4,5-b?]dithiophene donor (D?) unit, cyclopentadithiophene donor (D) and ethylrhodaniae acceptor unit having 6% light to energy conversion efficiency. <i>Journal of Materials</i>	13	19
272	Ferrocenyl-ended thieno-vinylene oligomers: donor-acceptor polarization and mixed-valence properties with emphasis on the raman mapping of localized-to-delocalized transitions. <i>Chemistry - A European Journal</i> , 2009 , 15, 2548-59	4.8	19
271	Injection and Recombination in Dye-Sensitized Solar Cells with a Broadband Absorbance Metal-Free Sensitizer Based on Oligothienylvinylene. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 18623-18627	3.8	19

270	Ruthenocene as a new donor fragment in [60]fullerenedonor dyads. <i>Tetrahedron Letters</i> , 2005 , 46, 4781	-2 4784	19
269	High performance ADA oligothiophene-based organic solar cells employing two-step annealing and solution-processable copper thiocyanate (CuSCN) as an interfacial hole transporting layer. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 17344-17353	13	19
268	D-A-D-ED-A-D type diketopyrrolopyrrole based small molecule electron donors for bulk heterojunction organic solar cells. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 16950-7	3.6	18
267	The effect of acceptor end groups on the physical and photovoltaic properties of ADA type oligomers with same S, N-heteropentacene central electron donor unit for solution processed organic solar cells. <i>Dyes and Pigments</i> , 2016 , 129, 209-219	4.6	18
266	Dye-sensitized solar cells based on triazine-linked porphyrin dyads containing one or two carboxylic acid anchoring groups. <i>Inorganic Chemistry Frontiers</i> , 2014 , 1, 256-270	6.8	18
265	Bulk heterojunction organic photovoltaic devices based on small molecules featuring pyrrole and carbazole and 2-(4-nitrophenyl)acrylonitrile acceptor segments as donor and fullerene derivatives as acceptor. <i>Dyes and Pigments</i> , 2012 , 94, 320-329	4.6	18
264	Porphyrin based pushpull conjugates as donors for solution-processed bulk heterojunction solar cells: a case of metal-dependent power conversion efficiency. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 15529-15533	13	18
263	Dithienylthienothiadiazole-based organic dye containing two cyanoacrylic acid anchoring units for dye-sensitized solar cells. <i>RSC Advances</i> , 2012 , 2, 11457	3.7	18
262	Efficient Bulk Heterojunction Solar Cells Based on a Broadly Absorbing Phenylenevinylene Copolymer Containing Thiophene and Pyrrole Rings. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 7056-70	<i>હે</i> 6 ⁸	18
261	Low band-gap phenylenevinylene and fluorenevinylene small molecules containing triphenylamine segments: Synthesis and application in bulk heterojunction solar cells. <i>Organic Electronics</i> , 2011 , 12, 774	<i>-</i> 784	18
260	Comparison between the Photophysical Properties of Pyrazolo- and Isoxazolo[60]fullerenes with Dual Donors (Ferrocene, Aniline and Alkoxyphenyl). <i>European Journal of Organic Chemistry</i> , 2007 , 2007, 2175-2185	3.2	18
259	Synthesis and Photophysical Properties of a Pyrazolino[60]fullerene with Dimethylaniline Connected by an Acetylene Linkage. <i>European Journal of Organic Chemistry</i> , 2006 , 2006, 2344-2351	3.2	18
258	Investigation of schottky barrier of poly(phenyl azo methane thiophene) using currentwoltage and impedance spectroscopy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2001 , 79, 146-153	3.1	18
257	Studies on electrical and photoelectrical behaviour of ITO/ArV/In Schottky barrier device. <i>Synthetic Metals</i> , 1999 , 106, 97-105	3.6	18
256	A Very Low Band Gap Diketopyrrolopyrrole-Porphyrin Conjugated Polymer. <i>ChemPlusChem</i> , 2017 , 82, 625-630	2.8	17
255	Phenothiazine-based small-molecule organic solar cells with power conversion efficiency over 7% and open circuit voltage of about 1.0 V using solvent vapor annealing. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 6321-6329	3.6	17
254	Dicyanoquinodimethane-substituted benzothiadiazole for efficient small-molecule solar cells. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 7235-41	3.6	17
253	Effect of linker used in DAA metal free dyes with different Espacers for dye sensitized solar cells. <i>Organic Electronics</i> , 2012 , 13, 3108-3117	3.5	17

A ready access to unprecedented N-anilinopyrazolino[60]fullerenes. Tetrahedron Letters, 2004, 45, 1651±1654 17 252 Synthesis and Characterization of 11,11,12,12-Tetracyano-1,4-anthraquinodimethanes (1,4-TCAQs): Novel Electron Acceptors with Photoinduced Charge-Transfer Properties. Journal of Organic 251 4.2 17 Chemistry, **1995**, 60, 4077-4084 Efficient bulk heterojunction solar cells based on solution processed small molecules based on the same benzo[1,2-b:4, 5-b']thiophene unit as core donor and different terminal units. Nanoscale, 2015 16 250 7.7 , 7, 7692-703 A supramolecular assembling of zinc porphyrin with a £tonjugated oligo(phenylenevinylene) 16 249 3.7 (oPPV) molecular wire for dye sensitized solar cell. RSC Advances, 2015, 5, 88508-88519 Small molecule based N-phenyl carbazole substituted diketopyrrolopyrroles as donors for solution-processed bulk heterojunction organic solar cells. Physical Chemistry Chemical Physics, 248 3.6 16 2016, 18, 22999-3005 Pyridyl vs. bipyridyl anchoring groups of porphyrin sensitizers for dye sensitized solar cells. RSC 16 247 3.7 Advances, 2016, 6, 22187-22203 Near infrared organic semiconducting materials for bulk heterojunction and dye-sensitized solar 246 6.6 16 cells. Chemical Record, 2014, 14, 419-81 Synthesis, optical and electrochemical properties of small molecules DMM-TPA[DTS(FBTTh3)3] and TPA[DTS(FBTTh3)3], and their application as donors for bulk heterojunction solar cells. Journal of 16 245 13 Materials Chemistry A, 2014, 2, 12368-12379 Diarylmethanofullerene: Efficient Polymer Solar Cells with Low-Band-Gap Copolymer. Journal of 3.8 16 244 Physical Chemistry C, 2013, 117, 13350-13356 Pyrazolino [60] fullerenes: synthesis and properties. Comptes Rendus Chimie, 2006, 9, 1058-1074 243 2.7 16 New cyclopentadithiophene (CDT) linked porphyrin donors with different end-capping acceptors 242 7.1 15 for efficient small molecule organic solar cells. Journal of Materials Chemistry C, 2017, 5, 4742-4751 Covalent decoration onto the outer walls of double walled carbon nanotubes with 241 7.1 15 perylenediimides. Journal of Materials Chemistry C, 2015, 3, 4960-4969 Peripheral versus axial substituted phthalocyanine-double-walled carbon nanotube hybrids as light 240 7.1 15 harvesting systems. Journal of Materials Chemistry C, 2015, 3, 10215-10224 Edge-on and face-on functionalized Pc on enriched semiconducting SWCNT hybrids. Nanoscale, 239 7.7 15 2018, 10, 5205-5213 Ultrafast electron transfer in all-carbon-based SWCNT-C60 donor-acceptor nanoensembles 238 7.7 15 connected by poly(phenylene-ethynylene) spacers. Nanoscale, 2016, 8, 14716-24 Charge recombination losses in thiophene-substituted porphyrin dye-sensitized solar cells. Dyes 4.6 15 237 and Pigments, **2016**, 126, 147-153 Solution processed bulk heterojunction solar cells based on ADA small molecules with a dihydroindoloindole (DINI) central donor and different acceptor end groups. Journal of Materials 236 7.1 15 Chemistry C, 2016, 4, 3508-3516 Nonfullerene Polymer Solar Cells Reaching a 9.29% Efficiency Using a BODIPY-Thiophene 6.1 235 15 Backboned Donor Material. ACS Applied Energy Materials, 2018, 1, 3359-3368

234	Synthesis and photovoltaic properties of DAD type small molecules containing diketopyrrolopyrrole (DPP) acceptor central unit with different donor terminal units. <i>Organic Electronics</i> , 2014 , 15, 2116-2125	3.5	15
233	A new unsymmetrical near-IR small molecule with squaraine chromophore for solution processed bulk heterojunction solar cells. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 7029-7037	7.1	15
232	Bulk heterojunction solar cells based on a low band gap soluble bisazopyrrole and the corresponding BF2-azopyrrole complex. <i>Journal of Materials Chemistry</i> , 2010 , 20, 6464		15
231	Charge transfer and photogeneration process in device consisting of safranine O dye and TiO2 nano-particles. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2003 , 100, 13-17	3.1	15
230	Symmetrical and unsymmetrical triphenylamine based diketopyrrolopyrroles and their use as donors for solution processed bulk heterojunction organic solar cells. <i>RSC Advances</i> , 2016 , 6, 99685-996	5 9 47	15
229	Efficient Solution Processable Polymer Solar Cells Using Newly Designed and Synthesized Fullerene Derivatives. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 19493-19503	3.8	15
228	Ni-Porphyrin-based small molecule for efficient organic solar cells (>9.0%) with a high open circuit voltage of over 1.0 V and low energy loss. <i>Chemical Communications</i> , 2018 , 54, 14144-14147	5.8	15
227	Plasmonic effects of copper nanoparticles in polymer photovoltaic devices for outdoor and indoor applications. <i>Applied Physics Letters</i> , 2020 , 116, 253302	3.4	14
226	New D-A1-D-A2-Type Regular Terpolymers Containing Benzothiadiazole and Benzotrithiophene Acceptor Units for Photovoltaic Application. <i>ACS Applied Materials & Amp; Interfaces</i> , 2016 , 8, 32998-330	69 5	14
225	Conjugated small molecules with broad absorption containing pyridine and pyran units: Synthesis and application for bulk heterojunction solar cells. <i>Organic Electronics</i> , 2010 , 11, 2045-2054	3.5	14
224	Photovoltaic properties of liquid-state photoelectrochemical cells based on PPAT and a composite film of PPAT and nanocrystalline titanium dioxide. <i>Synthetic Metals</i> , 2008 , 158, 509-515	3.6	14
223	[60]Fullerene-based liquid crystals acting as acid-sensitive fluorescent probes. <i>Chemical Communications</i> , 2008 , 4590-2	5.8	14
222	Syntheses, electrochemistry and molecular modeling of N,N?-dicyanoquinonediimine (DCNQI) derivatives of substituted 1,4-anthracenediones: precursors for organic metals <i>Tetrahedron</i> , 1993 , 49, 4881-4892	2.4	14
221	The Aza-di-Emethane rearrangement of O-acetyl 2,2-dimethyl-4,4-diphenylbut-3-enal oxime. <i>Journal of the Chemical Society Chemical Communications</i> , 1987 , 1874-1875		14
220	Phenothiazine-based small molecules for bulk heterojunction organic solar cells; variation of side-chain polarity and length of conjugated system. <i>Organic Electronics</i> , 2019 , 65, 232-242	3.5	14
219	New indolo carbazole-based non-fullerene n-type semiconductors for organic solar cell applications. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 543-552	7.1	14
218	Reduced Energy Offsets and Low Energy Losses Lead to Efficient (~10% at 1 sun) Ternary Organic Solar Cells. <i>ACS Energy Letters</i> , 2018 , 3, 2418-2424	20.1	14
217	Ferrocene-diketopyrrolopyrrole based small molecule donors for bulk heterojunction solar cells. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 7262-7269	3.6	13

(2010-2015)

216	band-gap DA copolymers: Application as donor bulk heterojunction polymer solar cells. <i>Polymer</i> , 2015 , 65, 193-201	3.9	13	
215	High photocurrent in oligo-thienylenevinylene-based small molecule solar cells with 4.9% solar-to-electrical energy conversion. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 11340-11348	13	13	
214	Low Energy Loss of 0.57 eV and High Efficiency of 8.80% in Porphyrin-Based BHJ Solar Cells. <i>ACS Applied Energy Materials</i> , 2018 , 1, 1304-1315	6.1	13	
213	High photo-current in solution processed organic solar cells based on a porphyrin core A-ED-EA as electron donor material. <i>Organic Electronics</i> , 2016 , 38, 330-336	3.5	13	
212	A dithieno[3,2-b:2',3'-d]pyrrole based, NIR absorbing, solution processable, small molecule donor for efficient bulk heterojunction solar cells. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 32096-32106	3.6	13	
211	New low bandgap near-IR conjugated D-A copolymers for BHJ polymer solar cell applications. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 8389-400	3.6	13	
210	New solution processed bulk-heterojunction organic solar cells based on a triazine-bridged porphyrin dyad as electron donor. <i>RSC Advances</i> , 2014 , 4, 50819-50827	3.7	13	
209	Mass spectrometry studies of the retro-cycloaddition reaction of pyrrolidino and 2-pyrazolinofullerene derivatives under negative ESI conditions. <i>Journal of the American Society for Mass Spectrometry</i> , 2011 , 22, 557-67	3.5	13	
208	Synthesis and photophysical properties of a [60]fullerene compound with dimethylaniline and ferrocene connected through a pyrazolino group: a study by laser flash photolysis. <i>Physical Chemistry Chemical Physics</i> , 2006 , 8, 4104-11	3.6	13	
207	Dark, photoelectrical properties and impedance analysis of organic semiconductor based donor/acceptor device. <i>Thin Solid Films</i> , 2004 , 467, 220-226	2.2	13	
206	Synthesis and Photoinduced Intermolecular Electronic Acceptor Ability of Pyrazolo[60]fullerenes vs Tetrathiafulvalene. <i>Bulletin of the Chemical Society of Japan</i> , 2005 , 78, 1500-1507	5.1	13	
205	Study on electrical and photoelectrical behaviour of undoped and doped furazano[3,4-b]piperazine (FP) thin-film devices. <i>Synthetic Metals</i> , 1995 , 75, 201-207	3.6	13	
204	Studies on the scope of the aza-di-Emethane rearrangement of Eunsaturated imines. <i>Journal of the Chemical Society Perkin Transactions</i> 1, 1987 , 743-746		13	
203	Modulation of the exfoliated graphene work function through cycloaddition of nitrile imines. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 29582-29590	3.6	13	
202	Panchromatic ternary organic solar cells with 9.44% efficiency incorporating porphyrin-based donors. <i>Nanoscale</i> , 2018 , 10, 12100-12108	7.7	13	
201	Characterization of two new (A配DA type dyes with different central D unit and their application for dye sensitized solar cells. <i>Organic Electronics</i> , 2014 , 15, 1780-1790	3.5	12	
200	Electron transfer dynamics in dye-sensitized solar cells utilizing oligothienylvinylene derivates as organic sensitizers. <i>ChemSusChem</i> , 2009 , 2, 344-9	8.3	12	
199	Simple sensitizers of low band gap based on 4-nitro-Eyanostilbene prepared from a one-step reaction for efficient dye-sensitized solar cells. <i>Organic Electronics</i> , 2010 , 11, 1242-1249	3.5	12	

198	ELECTRICAL AND PHOTOELECTRICAL PROPERTIES OF CHROMOTROPE 2R THIN FILM DEVICES, USING DIFFERENT ELECTRODES. <i>Journal of Physics and Chemistry of Solids</i> , 1997 , 58, 195-205	3.9	12
197	Charge conduction process and photovoltaic effects in thiazole yellow (TY) thin film based Schottky devices. <i>Thin Solid Films</i> , 1997 , 310, 279-288	2.2	12
196	Through-space communication in a TTFI160IITF triad. New Journal of Chemistry, 2007, 31, 230-236	3.6	12
195	Substitution effects on the aza-di-Emethane rearrangement of imines. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1987 , 1039-1042		12
194	An all-small-molecule organic solar cell derived from naphthalimide for solution-processed high-efficiency nonfullerene acceptors. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 709-717	7.1	12
193	Oligomers of cyclopentadithiophene-vinylene in aromatic and quinoidal versions and redox species with intermediate forms. <i>Chemical Science</i> , 2017 , 8, 8106-8114	9.4	11
192	Influence of thermal and solvent annealing on the morphology and photovoltaic performance of solution processed, DAD type small molecule-based bulk heterojunction solar cells. <i>RSC Advances</i> , 2015 , 5, 93579-93590	3.7	11
191	Benzothiadiazole Substituted Semiconductor Molecules for Organic Solar Cells: The Effect of the Solvent Annealing Over the Thin Film Hole Mobility Values. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 13782-13789	3.8	11
190	Bidirectional charge-transfer behavior in carbon-based hybrid nanomaterials. <i>Nanoscale</i> , 2019 , 11, 149	978 7 .1 / 49	92 1
189	Double-wall carbon nanotube-porphyrin supramolecular hybrid: synthesis and photophysical studies. <i>ChemPhysChem</i> , 2014 , 15, 100-8	3.2	11
188	New donor acceptor conjugated polymers based on benzo[1,2-b:4,5-b?] dithiophene for photovoltaic cells. <i>Synthetic Metals</i> , 2013 , 166, 7-13	3.6	11
187	Organic dyes incorporating oligothienylenevinylene for efficient dye-sensitized solar cells. <i>Organic Letters</i> , 2012 , 14, 5732-5	6.2	11
186	Formation and properties of electroactive fullerene based films with a covalently attached ferrocenyl redox probe. <i>Electrochimica Acta</i> , 2011 , 56, 5566-5574	6.7	11
185	Charge conduction process and photoelectrical properties of Schottky barrier device based on sulphonated nickel phthalocyanine. <i>Synthetic Metals</i> , 2008 , 158, 620-629	3.6	11
184	Photophysical properties of the newly synthesized triad based on [70]fullerene studies with laser flash photolysis. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 4335-41	3.4	11
183	Synthesis and photophysical properties of ruthenocene-[60]fullerene dyads. <i>New Journal of Chemistry</i> , 2006 , 30, 93-101	3.6	11
182	Optical properties and photoinduced processes in multicomponent architectures with oligophenylenevinylene units. <i>Synthetic Metals</i> , 2004 , 147, 19-28	3.6	11
181	Photocarriers generation process and photovoltaic effect in PPHT thin film Schottky barrier devices. <i>Synthetic Metals</i> , 1999 , 107, 197-202	3.6	11

180	Electrical and photovoltaic effects in organic p-n junction solar cell using furfural resin (FR) and thiazole yellow (TY). <i>Synthetic Metals</i> , 1996 , 83, 1-6	3.6	11
179	The aza-di-Emethane rearrangement of 1-aryl-4,4-dimethyl-6,6-diphenyl-2-azahexa-2,5-dienes. The influence of substituents on the N-benzyl group. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1989 , 903-906		11
178	Extension of the aza-di-Emethane reaction to stable derivatives. Photochemical cyclization of Eunsaturated oxime acetates. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1991 , 223-228		11
177	Thermally induced tuning of SPR of metal-fullerene Ag(26%)-C 70 nanocomposite. <i>Surface and Coatings Technology</i> , 2017 , 324, 361-367	4.4	11
176	High performance dye-sensitized solar cell from a cocktail solution of a ruthenium dye and metal free organic dye. <i>RSC Advances</i> , 2016 , 6, 41151-41155	3.7	11
175	A D-FA1-FA2 push-pull small molecule donor for solution processed bulk heterojunction organic solar cells. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 13918-26	3.6	11
174	Butterfly architecture of NIR Aza-BODIPY small molecules decorated with phenothiazine or phenoxazine. <i>Chemical Communications</i> , 2019 , 55, 12535-12538	5.8	11
173	Modulation of the power conversion efficiency of organic solar cells via architectural variation of a promising non-fullerene acceptor. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 574-582	13	11
172	Photovoltaic Properties of a Porphyrin-Containing Polymer as Donor in Bulk Heterojunction Solar Cells With Low Energy Loss. <i>Solar Rrl</i> , 2018 , 2, 1700168	7.1	11
171	Fabrication of efficient dye-sensitized solar cells with photoanode containing TiO2Au and TiO2Ag plasmonic nanocomposites. <i>Journal of Materials Science: Materials in Electronics</i> , 2018 , 29, 1820)9 ² 1 ¹ 82	20 ¹¹
170	Characterization of metal-free D-(EA)2 organic dye and its application as cosensitizer along with N719 dye for efficient dye-sensitized solar cells. <i>Indian Journal of Physics</i> , 2015 , 89, 1041-1050	1.4	10
169	Synthesis and photophysical properties of regioregular low bandgap copolymers with controlled 5-fluorobenzotriazole orientation for photovoltaic application. <i>Polymer Chemistry</i> , 2016 , 7, 5849-5861	4.9	10
168	Photovoltaic properties of low band gap copolymers based on phenylenevinylene donor and cyanovinylene 4-nitrophenyl acceptor units. <i>Organic Electronics</i> , 2012 , 13, 252-263	3.5	10
167	Photovoltaic properties of bulk heterojunction devices based on Cul-PVA as electron donor and PCBM and modified PCBM as electron acceptor. <i>Materials Science-Poland</i> , 2012 , 30, 10-16	0.6	10
166	Optical, electrical and photovoltaic properties of thermally annealed PPHT:DDE blend thin films. <i>Journal of Physics and Chemistry of Solids</i> , 2008 , 69, 2639-2651	3.9	10
165	Ternary All-Small-Molecule Solar Cells with Two Small-Molecule Donors and Y6 Nonfullerene Acceptor with a Power Conversion Efficiency over Above 14% Processed from a Nonhalogenated Solvent. <i>Solar Rrl</i> , 2020 , 4, 2000460	7.1	10
164	New alternating DA1DA2 copolymer containing two electron-deficient moieties based on benzothiadiazole and 9-(2-Octyldodecyl)-8H-pyrrolo[3,4-b]bisthieno[2,3-f:3',2'-h]quinoxaline-8,10(9H)-dione for efficient	2.5	10
163	polymer solar cells. <i>Journal of Polymer Science Part A,</i> 2016 , 54, 155-168 Synthesis of alternating DA1DA2 terpolymers comprising two electron-deficient moieties, quinoxaline and benzothiadiazole units for photovoltaic applications. <i>Polymer Chemistry</i> , 2016 , 7, 4025-	-4035	10

162	Fullerene/Non-fullerene Alloy for High-Performance All-Small-Molecule Organic Solar Cells. <i>ACS Applied Materials & Amp; Interfaces</i> , 2021 , 13, 6461-6469	9.5	10
161	Polymer solar cells based low bandgap A1-D-A2-D terpolymer based on fluorinated thiadiazoloquinoxaline and benzothiadiazole acceptors with energy loss less than 0.5 LeV. <i>Organic Electronics</i> , 2017 , 46, 192-202	3.5	9
160	Synthesis, characterization and thermally induced structural transformation of Au-C 70 nanocomposite thin films. <i>Vacuum</i> , 2017 , 142, 146-153	3.7	9
159	Cardanol- and Guaiacol-Sourced Solution-Processable Green Small Molecule-Based Organic Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 5891-5902	8.3	9
158	Asymmetric triphenylamine-phenothiazine based small molecules with varying terminal acceptors for solution processed bulk-heterojunction organic solar cells. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 6390-6400	3.6	9
157	Synthesis of new D-A1 D -A2 type low bandgap terpolymers based on different thiadiazoloquinoxaline acceptor units for efficient polymer solar cells. <i>RSC Advances</i> , 2016 , 6, 71232-713	244	9
156	Low energy ion irradiation induced SPR of Cu-Fullerene C70 nanocomposite thin films. <i>Journal of Alloys and Compounds</i> , 2018 , 767, 733-744	5.7	9
155	Efficient bulk heterojunction solar cells based on DA copolymers as electron donors and PC70BM as electron acceptor. <i>Materials Chemistry and Physics</i> , 2012 , 135, 25-31	4.4	9
154	Efficient Photoinduced Energy and Electron Transfer in Zn -Porphyrin/Fullerene Dyads with Interchromophoric Distances up to 2.6 nm and No Wire-like Connectivity. <i>Chemistry - A European Journal</i> , 2017 , 23, 14200-14212	4.8	9
153	Robust ethylenedioxythiophene-vinylene oligomers from fragile thiophene-vinylene cores: synthesis and optical, chemical and electrochemical properties of multicharged shapes. <i>Chemistry - A European Journal</i> , 2015 , 21, 1713-25	4.8	9
152	Synthesis and photoinduced energy- and electron-transfer processes of C60-oligothienylenevinylene-C70 dumbbell compounds. <i>Chemistry - A European Journal</i> , 2011 , 17, 5432-	.44 ⁸	9
151	Characterization of Safranine O based thin-film sandwich devices by analysing their electrical and photoelectrical behaviour. <i>Synthetic Metals</i> , 1997 , 88, 57-63	3.6	9
150	Characterization of ITOPPHTThetal contacts (PPHT=poly(3-phenylhydrazone thiophene)) using electrical and capacitance measurements. <i>Synthetic Metals</i> , 1998 , 95, 225-232	3.6	9
149	Relation between charge transfer and solvent polarity in fullerene derivatives: NMR studies. Journal of Materials Chemistry, 2002 , 12, 2130-2136		9
148	Ternary Organic Solar Cell with a Near-Infrared Absorbing Selenophene D iketopyrrolopyrrole-Based Nonfullerene Acceptor and an Efficiency above 10%. <i>Solar Rrl</i> , 2020 , 4, 1900471	7.1	9
147	Enhancement of photovoltaic efficiency through fine adjustment of indacene-based non-fullerene acceptor by minimal chlorination for polymer solar cells. <i>Nano Select</i> , 2020 , 1, 320-333	3.1	9
146	Efficient Ternary Polymer solar cells based ternary active layer consisting of conjugated polymers and non-fullerene acceptors with power conversion efficiency approaching near to 15.5%. <i>Solar Energy</i> , 2021 , 216, 217-224	6.8	9
145	Highly Efficient (15.08%) All-Small-Molecule Ternary Solar Cells Constructed with a Porphyrin as a Donor and Two Acceptors. <i>ACS Applied Energy Materials</i> , 2021 , 4, 4498-4506	6.1	9

144	Energy-level modulation of coumarin-based molecular donors for efficient all small molecule fullerene-free organic solar cells. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 1563-1573	13	9
143	Synthesis, optical and electrochemical properties new donor (DA) copolymers based on benzo[1,2-b:3,4-b?:6,5-b?] trithiophene donor and different acceptor units: Application as donor for photovoltaic devices. <i>Organic Electronics</i> , 2015 , 17, 167-177	3.5	8
142	The influence of the terminal acceptor and oligomer length on the photovoltaic properties of ADA small molecule donors. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 4763-4770	7.1	8
141	Optical properties of Cu-C70nanocomposite under low energy ion irradiation. <i>Materials Research Express</i> , 2018 , 5, 035044	1.7	8
140	Synthesis and characterization of zinc carboxyporphyrin complexes for dye sensitized solar cells. <i>New Journal of Chemistry</i> , 2018 , 42, 8151-8159	3.6	8
139	Use of Thienylenevinylene and Ethynyl Molecular Bridges in Organic Dyes for Dye-Sensitized Solar Cells: Implications for Device Performance. <i>ChemElectroChem</i> , 2014 , 1, 1126-1129	4.3	8
138	A New DA conjugated polymer P(PTQD-BDT) with PTQD acceptor and BDT donor units for BHJ polymer solar cells application. <i>Journal of Polymer Science Part A</i> , 2015 , 53, 2390-2398	2.5	8
137	S,N-Heteropentacene based small molecules with ADA structure for solution processed organic bulk heterojunction solar cells. <i>RSC Advances</i> , 2015 , 5, 102115-102125	3.7	8
136	Photochemical evidence of electronic interwall communication in double-wall carbon nanotubes. <i>Chemistry - A European Journal</i> , 2012 , 18, 16922-30	4.8	8
135	Effect of the bridge substitution on the efficiency of dye-sensitized solar cells. <i>Tetrahedron Letters</i> , 2012 , 53, 6665-6669	2	8
134	Photocurrent mechanism and photovoltaic properties of photo-electrochemical device based on PPAT and PPAT:TY blend. <i>Synthetic Metals</i> , 2009 , 159, 52-61	3.6	8
133	Photophysics, electrochemistry and structure of a pyrazolino[60]fullerene dendrimer in solid molecular films. <i>Synthetic Metals</i> , 2005 , 148, 47-52	3.6	8
132	Two new bulky substituted Zn porphyrins bearing carboxylate anchoring groups as promising dyes for DSSCs. <i>New Journal of Chemistry</i> , 2016 , 40, 5930-5941	3.6	8
131	New iridium-containing conjugated polymers for polymer solar cell applications. <i>New Journal of Chemistry</i> , 2018 , 42, 17296-17302	3.6	8
130	Performance analysis of TiO2 based dye sensitized solar cell prepared by screen printing and doctor blade deposition techniques. <i>Solar Energy</i> , 2021 , 226, 9-19	6.8	8
129	Low energy ion irradiation studies of fullerene C70 thin films IAn emphasis on mapping the local structure modifications. <i>Journal of Physics and Chemistry of Solids</i> , 2018 , 117, 204-214	3.9	7
128	Synthesis, characterization and photoinduced charge separation of carbon nanohorn-oligothienylenevinylene hybrids. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 1828-37	3.6	7
127	Enhanced efficiency of PbS quantum dot-sensitized solar cells using plasmonic photoanode. <i>Journal of Nanoparticle Research</i> , 2018 , 20, 1	2.3	7

126	N-Doped graphene/C covalent hybrid as a new material for energy harvesting applications. <i>Chemical Science</i> , 2018 , 9, 8221-8227	9.4	7
125	Cycloaddition of Nitrile Oxides to Graphene: a Theoretical and Experimental Approach. <i>Chemistry - A European Journal</i> , 2019 , 25, 14644-14650	4.8	7
124	High-efficiency polymer solar cells based on phenylenevinylene copolymer with BF2-azopyrrole complex and CN-PC70BM with solvent additive. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012 , 50, 1612-1618	2.6	7
123	PushBull triphenylamine based chromophores as photosensitizers and electron donors for molecular solar cells. <i>Tetrahedron</i> , 2013 , 69, 6875-6883	2.4	7
122	Bulk heterojunction photovoltaics using broadly absorbing small molecules based on 2-styryl-5-phenylazo-pyrrole. <i>Langmuir</i> , 2010 , 26, 17739-48	4	7
121	A phenylenevinylene copolymer with perylene bisimde units as organic sensitizer for dye-sensitized solar cells. <i>Synthetic Metals</i> , 2010 , 160, 1427-1432	3.6	7
120	Effect of thermal annealing and incorporating TiO2 layer on the photovoltaic performance of single- and bi-layer bulk heterojunction devices based on phenylenevinylene copolymer and small molecule. <i>Organic Electronics</i> , 2010 , 11, 731-742	3.5	7
119	DC electrical and photovoltaic studies on Schottky barrier devices using the tetra aza difurazano decalin (TADFD) thin films. <i>Physica B: Condensed Matter</i> , 1997 , 229, 394-403	2.8	7
118	Investigation of Electrical and Photovoltaic Behaviour of Furfural Resin Thin Film Devices. <i>Physica Status Solidi A</i> , 1996 , 158, 599-610		7
117	Design, synthesis and photophysical properties of D1-A-D2-A-D1-type small molecules based on fluorobenzotriazole acceptor and dithienosilole core donor for solution processed organic solar cells. <i>Dyes and Pigments</i> , 2016 , 132, 387-397	4.6	7
116	Random D1A1D1A2 terpolymers based on diketopyrrolopyrrole and benzothiadiazolequinoxaline (BTQx) derivatives for high-performance polymer solar cells. <i>New Journal of Chemistry</i> , 2019 , 43, 5325-5334	3.6	7
115	Cyclopentadithiophene organic core in small molecule organic solar cells: morphological control of carrier recombination. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 3640-3648	3.6	6
114	Polymer solar cells based on DA low bandgap copolymers containing fluorinated side chains of thiadiazoloquinoxaline acceptor and benzodithiophene donor units. <i>New Journal of Chemistry</i> , 2018 , 42, 1626-1633	3.6	6
113	Regioselectivity of the Pauson-Khand reaction in single-walled carbon nanotubes. <i>Nanoscale</i> , 2018 , 10, 15078-15089	7.7	6
112	Low Energy Gap Triphenylamine Heteropentacene Dicyanovinyl Triad for Solution-Processed Bulk-Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 11262-11269	3.8	6
111	Novel electron-withdrawing Econjugated pyrene-containing poly(phenylquinoxaline)s. <i>Doklady Chemistry</i> , 2014 , 456, 65-71	0.8	6
110	Dithieno[3,2-b:2',3'-d]pyrrole-benzo[c][1,2,5]thiadiazole conjugate small molecule donors: effect of fluorine content on their photovoltaic properties. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 20513-	28522	6
109	Two new DA conjugated polymers P(PTQD-Th) and P(PTQD-2Th) with same 9-(2-octyldodecyl)-8 H -pyrrolo[3,4- b]bisthieno[2,3- f:3?,2?- h]quinoxaline-8,10(9 H)-dione acceptor and different donor units for BHJ polymer solar cells application. <i>Organic Electronics</i> , 2015 , 24, 137-146	3.5	6

108	Photoinduced Electron Transfer in Branched Bis(ferrocenylacetylene)-C60 Systems: Influence of the Nature of Conjugation. <i>European Journal of Organic Chemistry</i> , 2008 , 2008, 3535-3543	3.2	6
107	Incorporation of a Guaiacol-Based Small Molecule Guest Donor Enables Efficient Nonfullerene Acceptor-Based Ternary Organic Solar Cells. <i>Solar Rrl</i> , 2021 , 5, 2100402	7.1	6
106	Gold(III) Porphyrin Was Used as an Electron Acceptor for Efficient Organic Solar Cells <i>ACS Applied Materials & Amp; Interfaces</i> , 2022 ,	9.5	6
105	Synthesis and photovoltaic properties low bandgap D-A copolymers based on fluorinated thiadiazoloquinoxaline. <i>Organic Electronics</i> , 2017 , 43, 268-276	3.5	5
104	Donor-Eacceptor, triazine-linked porphyrin dyads as sensitizers for dye-sensitized solar cells. Journal of Porphyrins and Phthalocyanines, 2015 , 19, 175-191	1.8	5
103	ADA?DA Nonfullerene Acceptor Obtained by Fine-Tuning Side Chains on Pyrroles Enables PBDB-T-Based Organic Solar Cells with over 14% Efficiency. <i>ACS Applied Energy Materials</i> , 2020 , 3, 1198	31 ⁶ -T19	9∮
102	Synthesis and Photovoltaic Properties of New Conjugated D-A Polymers Based on the Same Fluoro-Benzothiadiazole Acceptor Unit and Different Donor Units. <i>ChemistrySelect</i> , 2020 , 5, 853-863	1.8	5
101	Increased Efficiency of Dye-Sensitized Solar Cells by Incorporation of a Espacer in DonorAcceptor Zinc Porphyrins Bearing Cyanoacrylic Acid as an Anchoring Group. <i>European Journal of Inorganic Chemistry</i> , 2018 , 2018, 2369-2379	2.3	5
100	Efficient Non-polymeric Heterojunctions in Ternary Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2018 , 1, 4203-4210	6.1	5
99	Synthesis and photovoltaic properties of new donor (DLA) copolymers based on benzo [1,2-b:3,4-b?:6,5-b??] trithiophene donor and different acceptor units (P1 and P2). RSC Advances, 2014, 4, 53531-53542	3.7	5
98	Synthesis and characterization of two carbazole-based alternating copolymers with 4-nitrophenylcyanovinylene pendant groups and their use as electron donors for bulk heterojunction solar cells. <i>RSC Advances</i> , 2013 , 3, 18821	3.7	5
97	A star-shaped sensitizer based on thienylenevinylene for dye-sensitized solar cells. <i>Tetrahedron Letters</i> , 2013 , 54, 431-435	2	5
96	Photovoltaic performance of quasi-solid state dye sensitized solar cells based on perylene dye and modified TiO2 photo-electrode. <i>Synthetic Metals</i> , 2010 , 160, 127-133	3.6	5
95	Charge-carrier transport and photogeneration processes in pyronine (G) (PYR) sensitized-TiO2 photovoltaic device. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004 , 110, 135-142	3.1	5
94	Charge transport conduction mechanism and photovoltaic effect in 4,4?-diazophenyl-3:3?-diaminobenzidine (DAPDAB) thin-film devices. <i>Synthetic Metals</i> , 1996 , 81, 15-22	3.6	5
93	A new synthesis of 1,1-diphenyl-3-arylisoquinolin-4-ones by the novel cyclization of 2-azabuta-1,3-dienes <i>Tetrahedron Letters</i> , 1985 , 26, 5213-5216	2	5
92	Synthesis and Photovoltaic Investigation of 8,10-Bis(2-octyldodecyl)-8,10-dihydro-9H-bisthieno[2?,3?:7,8;3?,2?:5,6] naphtho[2,3-d]imidazol-9-one Based Conjugated Polymers Using a Nonfullerene Acceptor. ACS	6.1	5
91	Applied Energy Materials, 2020, 3, 495-505 Synthesis and modification of Cu-C70 nanocomposite for plasmonic applications. Applied Surface Science, 2019, 466, 615-627	6.7	5

90	Synthesis and Characterization of Wide-Bandgap Conjugated Polymers Consisting of Same Electron Donor and Different Electron-Deficient Units and Their Application for Nonfullerene Polymer Solar Cells. <i>Macromolecular Chemistry and Physics</i> , 2020 , 221, 2000030	2.6	5
89	A ternary organic solar cell with 15.6% efficiency containing a new DPP-based acceptor. <i>Journal of Materials Chemistry C</i> ,	7.1	5
88	New BODIPY derivatives with triarylamine and truxene substituents as donors for organic bulk heterojunction photovoltaic cells. <i>Solar Energy</i> , 2021 , 227, 354-364	6.8	5
87	Photoexfoliation of two-dimensional materials through continuous UV irradiation. <i>Nanotechnology</i> , 2017 , 28, 125604	3.4	4
86	Cyclopentadithiophene-based co-oligomers for solution-processed organic solar cells. <i>Dyes and Pigments</i> , 2017 , 143, 112-122	4.6	4
85	Benzothiadiazole-pyrrolo[3,4-b]dithieno[2,3-f:3?,2?-h]quinoxalindione-based random terpolymer incorporating strong and weak electron accepting [1,2,5]thiadiazolo[3,4g]quinoxalinefor polymer solar cells. <i>Organic Electronics</i> , 2017 , 41, 1-8	3.5	4
84	Conjugated random terpolymers based on benzodithiophene, diketopyrrolopyrrole, and 8,10-bis(thiophen-2-yl)-2,5-di(nonadecan-3-yl)bis[1,3]thiazolo[4,5-f:5?,4?-h]thieno[3,4-b]quinoxaline for Efficient Polymer Solar Cell. <i>Journal of Polymer Science Part A</i> , 2019 , 57, 1478-1485	2.5	4
83	Hetero aromatic donors as effective terminal groups for DPP based organic solar cells. <i>RSC Advances</i> , 2016 , 6, 9023-9036	3.7	4
82	A bacteriochlorin-diketopyrrolopyrrole triad as a donor for solution-processed bulk heterojunction organic solar cells. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 9655-9664	7.1	4
81	Modulating charge carrier density and mobility in doped graphene by covalent functionalization. <i>Chemical Communications</i> , 2019 , 55, 9999-10002	5.8	4
80	Molecular dynamics of solutions of poly-3-octyl-thiophene and functionalized single wall carbon nanotubes studied by neutron scattering. <i>Chemical Physics</i> , 2013 , 427, 129-141	2.3	4
79	Synthesis and characterization of Econjugated copolymers with thieno-imidazole units in the main chain: application for bulk heterojunction polymer solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 7888-97	3.6	4
78	Influence of nitro group substitution at molecular ligand on optical, structural, charge-transport and photovoltaic properties of Sn (II) phthalocyanine. <i>Journal of Materials Science: Materials in Electronics</i> , 2009 , 20, 984-995	2.1	4
77	Charge conduction process and photoelectrical properties of bulk heterojunction device based on sulphonated nickel phthalocyanine and rose Bengal. <i>Journal of Physics and Chemistry of Solids</i> , 2009 , 70, 1422-1431	3.9	4
76	Study on electrical and photoelectrical behaviour of thin films of allyl viologen (AV) in PVA matrix. Journal of Materials Science: Materials in Electronics, 1997, 8, 47-55	2.1	4
75	Heck reaction on fullerene derivatives. <i>Tetrahedron Letters</i> , 2008 , 49, 3656-3658	2	4
74	Effect of 1,1?-dibenzyl-4,4?-bipyridyl dichloride (DBD) on charge-conduction process and photovoltaic response of a polypyrrole (PPy) thin-film device. <i>Polymer International</i> , 2002 , 51, 281-288	3.3	4
73	Effect of rare-earth doping on the electrical and photoelectrical properties of furazano [3,4-b] piperazine (FP) thin-film devices. <i>Synthetic Metals</i> , 1996 , 80, 249-256	3.6	4

72	Electrical properties of pure, doped and sensitized organic dye films. Thin Solid Films, 1988, 164, 249-25	32.2	4
71	Truxene Expanded BODIPY Star-Shaped Molecules as Acceptors for Non-Fullerene Solar Cells with over 13% Efficiency. ACS Applied Energy Materials,	6.1	4
70	New medium bandgap donor D-A -D-A type Copolymers Based on Anthra[1,2-b: 4,3-b":6,7-c"'] Trithiophene-8,12-dione Groups for High -Efficient non -fullerene Polymer Solar Cells <i>Macromolecular Rapid Communications</i> , 2022 , e2100839	4.8	4
69	Impacts of a second acceptor on the energy loss, blend morphology and carrier dynamics in non-fullerene ternary polymer solar cells. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 11727-11734	7.1	4
68	Oligothienylenevinylene Polarons and Bipolarons Confined between Electron-Accepting Perchlorotriphenylmethyl Radicals. <i>Chemistry - A European Journal</i> , 2018 , 24, 3776-3783	4.8	4
67	Dithienosilolephenylquinoxaline-based copolymers with A-D-A-D and A-D structures for polymer solar cells. <i>Journal of Polymer Science Part A</i> , 2018 , 56, 376-386	2.5	4
66	Prediction of non-radiative voltage losses in organic solar cells using machine learning. <i>Solar Energy</i> , 2021 , 228, 175-186	6.8	4
65	Regular conjugated DA copolymer containing two benzotriazole and benzothiadiazole acceptors and dithienosilole donor units for photovoltaic application. <i>RSC Advances</i> , 2017 , 7, 49204-49214	3.7	3
64	Occurrence of excited state charge separation in a N-doped grapheneperylenediimide hybrid formed via ElickEhemistry. <i>Nanoscale Advances</i> , 2019 , 1, 4009-4015	5.1	3
63	Thermally induced plasmonic resonance of Cu nanoparticles in fullerene C70 matrix. <i>Vacuum</i> , 2019 , 159, 423-429	3.7	3
62	Highly efficient ternary polymer solar cell with two non-fullerene acceptors. <i>Solar Energy</i> , 2020 , 199, 530-537	6.8	3
61	Triplet photosensitizer-nanotube conjugates: synthesis, characterization and photochemistry of charge stabilizing, palladium porphyrin/carbon nanotube conjugates. <i>Nanoscale</i> , 2020 , 12, 9890-9898	7.7	3
60	Effect of high energy ions on the electrical and morphological properties of Poly(3-Hexylthiophene) (P3HT) thin film. <i>Physica B: Condensed Matter</i> , 2018 , 537, 306-313	2.8	3
59	Synthesis of new 2,6-bis(6-fluoro-2-hexyl-2H-benzotriazol-4-yl)-4,4-bis(2-ethylhexyl)-4H-silolo[3,2-b:4,5-b']dithiophene based D-A conjugated terpolymers for photovoltaic application. <i>Polymer</i> , 2017 , 133, 195-204	3.9	3
58	Symmetrical molecules of low band gap with a central spacer connected via ether bond with terminal 4-nitro-Etyanostilbene units: Synthesis and application for bulk heterojunction solar cells. <i>Organic Electronics</i> , 2010 , 11, 1631-1641	3.5	3
57	Charge conduction process and photovoltaic properties of a N,N?-di-benzyl 4,4? bipyridyl dichloride based Schottky device. <i>Journal of Applied Physics</i> , 2003 , 94, 7692	2.5	3
56	Doping effect of viologen on rectification, charge transport processes and photovoltaic properties of furazano (3,4-b)piperazine thin film device. <i>Journal of Materials Science: Materials in Electronics</i> , 2001 , 12, 45-50	2.1	3
55	Characterization of ITO/ZnPc/CHR/In p-n junction-photovoltaic device using JN, CN and photoaction measurements. <i>Journal of Materials Science: Materials in Electronics</i> , 1999 , 10, 539-544	2.1	3

54	Photovoltaic effect in sensitized crystal violet dyes. <i>Journal of Materials Science Letters</i> , 1983 , 2, 433-4	3 6	3
53	Semitransparent organic solar cells: from molecular design to structureperformance relationships. Journal of Materials Chemistry C, 2021 , 10, 13-43	7.1	3
52	A bis(diketopyrrolopyrrole) dimer-containing ligand in platinum(II) polyyne oligomers exhibiting ultrafast photoinduced electron transfer with PCBM and solar cell properties. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 2363-2380	7.1	3
51	New Conjugated Polymers Based on Dithieno[2,3-e:3?,2?-g]Isoindole-7,9(8H)-Dione Derivatives for Applications in Nonfullerene Polymer Solar Cells. <i>Solar Rrl</i> , 2020 , 4, 1900475	7.1	3
50	Indole-based ADA?DA type acceptor-based organic solar cells achieve efficiency over 15 % with low energy loss. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 6203-6211	5.8	3
49	Polymer solar cell based on ternary active layer consists of medium bandgap polymer and two non-fullerene acceptors. <i>Solar Energy</i> , 2020 , 207, 1427-1433	6.8	3
48	Reducing Energy Loss in Organic Solar Cells by Changing the Central Metal in Metalloporphyrins. <i>ChemSusChem</i> , 2021 , 14, 3494-3501	8.3	3
47	Influence of the dipole moment on the photovoltaic performance of polymer solar cells employing non-fullerene small molecule acceptor. <i>Solar Energy</i> , 2021 , 221, 393-401	6.8	3
46	Evolution of SPR in 120 MeV silver ion irradiated Cu (18%) C60 nanocomposites thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2019 , 30, 8301-8311	2.1	2
45	Free-base porphyrin and [60]fullerene linked by oligomeric ethylenedioxythienylenevinylene bridge. <i>Journal of Porphyrins and Phthalocyanines</i> , 2015 , 19, 404-410	1.8	2
44	Synthesis and photophysical properties of semiconductor molecules D1-A-D2-A-D1-type structure based on derivatives of quinoxaline and dithienosilole for organics solar cells. <i>Organic Electronics</i> , 2016 , 39, 361-370	3.5	2
43	Heteroleptic Ru(ii)-bipyridine complexes based on hexylthioether-, hexyloxy- and hexyl-substituted thienylenevinylenes and their application in dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 11901-8	3.6	2
42	Investigation of C60 and C70 fullerenes under low energy ion impact. <i>Journal of Materials Science: Materials in Electronics</i> , 2018 , 29, 14762-14773	2.1	2
41	Application of Microwave Irradiation in Carbon Nanostructures 2013 , 1059-1098		2
40	Application of Microwave Irradiation in Fullerene and Carbon Nanotube Chemistry931-958		2
39	Intramolecular electron transfer in the novel photoreaction of some <code>Hunsaturated</code> oximeBoron trifluoride complexes. A new synthetic path to dihydroisoxazoles. <i>Journal of the Chemical Society Chemical Communications</i> , 1990 , 123-125		2
38	Electrical conduction mechanism in crystal violet dye sensitised with AgI. <i>Journal Physics D: Applied Physics</i> , 1983 , 16, 1977-1983	3	2
37	Photovoltaic and rectification properties of SnO2/malachite green + crystal violet dye/copper system. <i>Journal of Materials Science Letters</i> , 1984 , 3, 271-274		2

36	New High-Bandgap 8,10-Dihydro-9H-Bistieno[2?,3?:7.8;3?,2?:5.6]Naphtho[2,3-d] Imidazole-9-One-Based DonorAcceptor Copolymers for Nonfullerene Polymer Solar Cells. <i>Energy Technology</i> , 2020 , 8, 2000611	3.5	2
35	Ternary Polymer Solar Cells with High Open Circuit Voltage containing Fullerene and New Thieno[3',2',6,7][1]Benzothieno[3,2-b]Thieno[3,2-g][1]Benzothiophene-based Non-fullerene Small Molecule Acceptor. <i>Energy Technology</i> , 2021 , 9, 2001100	3.5	2
34	New Dithiazole Side Chain Benzodithiophene Containing DA Copolymers for Highly Efficient Nonfullerene Solar Cells. <i>Macromolecular Chemistry and Physics</i> , 2021 , 222, 2100053	2.6	2
33	Self-Assembly-Directed Organization of a Fullerene-Bisporphyrin into Supramolecular Giant Donut Structures for Excited-State Charge Stabilization. <i>Journal of the American Chemical Society</i> , 2021 , 143, 11199-11208	16.4	2
32	New ultra low bandgap thiadiazolequinoxaline-based D-A copolymers for photovoltaic applications. Organic Electronics, 2016 , 37, 411-420	3.5	2
31	Binary and Ternary Polymer Solar Cells Based on a Wide Bandgap D-A Copolymer Donor and Two Nonfullerene Acceptors with Complementary Absorption Spectral. <i>ChemSusChem</i> , 2021 , 14, 4731-4740	8.3	2
30	Effect of Mesogenic Side Groups on the Redox, Photophysical, and Solar Cell Properties of Diketopyrrolopyrrole-trans-bis(diphosphine)diethynylplatinum(II) Polymers. <i>ACS Applied Polymer Materials</i> , 2021 , 3, 1087-1096	4.3	2
29	NIR absorbing ortho-Eextended perylene bisimide as a promising material for bulk heterojunction organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 3012-3017	13	1
28	Synthesis and photovoltaic properties of new D-A copolymers based on 5,6-bis(2-ethylhexyl)naphtha[2,1-b:3,4-b?]dithiophene-2,9-diyl] donor and fluorine substituted 6,7-bis(9,9-didodecyl-9h-fluoren-2-yl)[1,2,5] thiadiazolo[3,4-g]quinoxaline acceptor units. <i>Journal of</i>	2.5	1
27	Polymer Science Part A, 2018, 56, 1297-1307 Investigation of the effect of rare earth doping on the electrical and photovoltaic properties of chromotrope 2R thin film devices. Journal of Materials Science: Materials in Electronics, 1998, 9, 91-97	2.1	1
26	Vibrational spectra of oligothienyl-vinylenes with donor-Edonor and donor-Edoceptor substitution patterns. <i>Journal of Molecular Structure</i> , 2007 , 834-836, 374-379	3.4	1
25	Charge conduction process and photovoltaic effect in ITO/ArV/CHR/In pl junction device. <i>Synthetic Metals</i> , 2001 , 124, 399-405	3.6	1
24	Panchromatic Triple Organic Semiconductor Heterojunctions for Efficient Solar Cells. <i>ACS Applied Energy Materials</i> , 2020 , 3, 12506-12516	6.1	1
23	Synthesis and electronic properties of pyridine end-capped cyclopentadithiophene-vinylene oligomers <i>RSC Advances</i> , 2020 , 10, 41264-41271	3.7	1
22	Regioselective preparation of a bis-pyrazolinofullerene by a macrocyclization reaction. <i>Chemical Communications</i> , 2016 , 52, 13205-13208	5.8	1
21	Ternary Polymer Solar Cells Using Two Polymers P1 and P3 with Similar Chemical Structures and Nonfullerene Acceptor Attained Power Conversion Efficiency Over 15.5% with Low Energy Loss of 0.55 eV. <i>Energy Technology</i> , 2021 , 9, 2000926	3.5	1
20	Optimization of the Donor Material Structure and Processing Conditions to Obtain Efficient Small-Molecule Donors for Bulk Heterojunction Solar Cells. <i>ChemPhotoChem</i> , 2018 , 2, 81-88	3.3	1
19	[All]-S,S-dioxide Oligo-Thienylenevinylenes: Synthesis and Structural/Electronic Shapes from Their Molecular Force Fields. <i>Chemistry - A European Journal</i> , 2019 , 25, 464-468	4.8	1

18	High-efficiency fullerene free ternary organic solar cells based with two small molecules as donor. <i>Optical Materials</i> , 2021 , 118, 111217	3.3	1
17	Ternary polymer solar cells based on wide bandgap and narrow bandgap non-fullerene acceptors with an efficiency of 16.40 % and a low energy loss of 0.53 eV. <i>Materials Today Energy</i> , 2021 , 21, 10084	13 ⁷	1
16	Efficient ternary polymer solar cell using wide bandgap conjugated polymer donor with two non-fullerene small molecule acceptors enabled power conversion efficiency of 16% with low energy loss of 0.47 eV. <i>Nano Select</i> , 2021 , 2, 1326-1335	3.1	1
15	New wide band gap Econjugated copolymers based on anthra[1,2-b: 4,3-b': 6,7-c''] trithiophene-8,12-dione for high performance non-fullerene polymer solar cells with an efficiency of 15.07 %. <i>Polymer</i> , 2022 , 251, 124892	3.9	1
14	Noncovalent Conformational Locks Enabling Efficient Nonfullerene Acceptors. Solar Rrl,2100768	7.1	O
13	Enhanced electronic communication through a conjugated bridge in a porphyrinfullerene donorficceptor couple. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 10889-10898	7.1	O
12	Efficient ternary bulk heterojunction organic solar cells using a low-cost nonfullerene acceptor. Journal of Materials Chemistry C, 2022 , 10, 4372-4382	7.1	O
11	Novel Pyrrolo [3,4-b] dithieno [3, 2-f:2",3"-h] quinoxaline-8,10 (9H)-dione Based Wide Bandgap Conjugated Copolymers for Bulk Heterojunction Polymer Solar Cells <i>Macromolecular Rapid</i> <i>Communications</i> , 2022 , e2200060	4.8	O
10	Ternary All-Small-Molecule Solar Cells with Two Small-Molecule Donors and Y6 Nonfullerene Acceptor with a Power Conversion Efficiency over Above 14% Processed from a Nonhalogenated Solvent. <i>Solar Rrl</i> , 2020 , 4, 2070115	7.1	
9	Synthesis and Optical and Electrochemical Properties of Novel Random Terpolymers Based on Diketopyrrolopyrrole and Benzodithiazole/Quinoxaline Units for Polymer Solar Cells. <i>Doklady Chemistry</i> , 2020 , 490, 6-10	0.8	
8	Synthesis of new conjugated copolymers containing 4,8-bis(dodecyloxy)benzo[1,2-b:4,5-b?]dithiophene/5,7-bis(3,4-diethylthien-2-yl)-2,3-diphenylthieno[3, and		
7	4,8-bis(dodecyloxy)benzo[1,2-b:4,5-b?]dithiophene/4,6-di(3,4-diethylthien-2-yl)-thieno[3,4-c][1,2,5]thia derivatives for photovoltaic applications. <i>Polymer Science - Series B</i> , 2013 , 55, 373-381 Fullerene-Rich Nanostructures699-714	ndiazol	e
6	Charge transport mechanism and photovoltaic behaviour of undoped and I2 doped tris (1,10 phenanthroline) iron (II) complex (TPFe) thin film devices. <i>Journal of Materials Science: Materials in Electronics</i> , 1998 , 9, 9-15	2.1	
5	Tuning of structural and optical properties of Au nanoparticles in amorphous-carbon. <i>Physica Scripta</i> , 2020 , 95, 105002	2.6	
4	New Donor Acceptor Random Terpolymers with Wide Absorption Spectra of 300 11000 nm for Photovoltaic Applications. <i>Doklady Physical Chemistry</i> , 2020 , 495, 196-200	0.8	
3	High-Performance Fullerene Free Polymer Solar Cells Based on New Thiazole -Functionalized Benzo[1,2-b:4,5-b?]dithiophene D-A Copolymer Donors. <i>ChemistrySelect</i> , 2021 , 6, 7025-7036	1.8	
2	New Random Terpolymers Based on Bis(4,5-didodecylthiophen-2-yl)-[1,2,5]thiadiazolo[3,4-i]dithieno[3,2-a:2',3'-c]phenazine with Variable Absorption Spectrum as Promising Materials for Organic Solar Cells. <i>Doklady Physical</i>	0.8	
1	Chemistry, 2021 , 496, 1-7 Selective Screening of Biological Thiols by Means of an Unreported Magenta Interaction and Evaluation Using Smartphones. <i>ACS Omega</i> , 2018 , 3, 6617-6623	3.9	