Wallace Wh Wong

List of Publications by Citations

113 papers	3,538 citations	33 h-index	56 g-index
123 ext. papers	3,936 ext. citations	6.9 avg, IF	5.23 L-index

#	Paper	IF	Citations
113	A molecular nematic liquid crystalline material for high-performance organic photovoltaics. *Nature Communications*, **2015**, 6, 6013	17.4	455
112	Organic solar cells using a high-molecular-weight benzodithiophene-benzothiadiazole copolymer with an efficiency of 9.4%. *Advanced Materials*, **2015**, 27, 702-5	24	176
111	The role of solvent vapor annealing in highly efficient air-processed small molecule solar cells. *Journal of Materials Chemistry A*, **2014**, 2, 9048	13	120
110	Self-Assembling Thiophene Dendrimers with a Hexa-peri-hexabenzocoronene Core: Synthesis, Characterization and Performance in Bulk Heterojunction Solar Cells. *Chemistry of Materials*, **2010**, 22, 457-466	9.6	106
109	Solution Processable Fluorenyl Hexa-peri-hexabenzocoronenes in Organic Field-Effect Transistors and Solar Cells. *Advanced Functional Materials*, **2010**, 20, 927-938	15.6	100
108	Organic photovoltaic modules fabricated by an industrial gravure printing proofer. *Solar Energy Materials and Solar Cells*, **2013**, 109, 47-55	6.4	97
107	Tetrakis(imidazolium) macrocyclic receptors for anion binding. *Organic and Biomolecular Chemistry*, **2005**, 3, 4201-8	3.9	91
106	Emissive Molecular Aggregates and Energy Migration in Luminescent Solar Concentrators. *Accounts of Chemical Research*, **2017**, 50, 49-57	24.3	86
105	Highly Fluorescent Molecularly Insulated Perylene Diimides: Effect of Concentration on Photophysical Properties. *Chemistry of Materials*, **2017**, 29, 8395-8403	9.6	83
104	Enabling high-mobility, ambipolar charge-transport in a DPP-benzotriazole copolymer by side-chain engineering. *Chemical Science*, **2015**, 6, 6949-6960	9.4	81
103	Concentrating aggregation-induced fluorescence in planar waveguides: a proof-of-principle. *Scientific Reports*, **2014**, 4, 4635	4.9	69
102	High-performance polymer solar cells with a conjugated zwitterion by solution processing or thermal deposition as the electron-collection interlayer. *Journal of Materials Chemistry*, **2012**, 22, 24155		69
101	Hexa-peri-hexabenzocoronene in organic electronics. *Pure and Applied Chemistry*, **2012**, 84, 1047-1067	2.1	68
100	Electroactive and Photoactive Poly[Isoindigo-alt-EDOT] Synthesized Using Direct (Hetero)Arylation Polymerization in Batch and in Continuous Flow. *Chemistry of Materials*, **2015**, 27, 2137-2143	9.6	66
99	Heteropolymetallic copper(II)-gold(III) dithiocarbamate [2]catenanes via magic ring synthesis. *Chemical Communications*, **2005**, 2214-6	5.8	66
98	Metal-directed self-assembly of bimetallic dithiocarbamate transition metal cryptands and their binding capabilities. *Chemical Communications*, **2003**, 2408-9	5.8	66
97	Silicon Analogues of Polyfluorene as Materials for Organic Electronics. *Australian Journal of Chemistry*, **2009**, 62, 393	1.2	63

96	Effect of molecular weight on the properties and organic solar cell device performance of a donor–acceptor conjugated polymer. *Polymer Chemistry*, **2015**, 6, 2312-2318	4.9	58
95	Ditopic redox-active polyferrocenyl zinc(II) dithiocarbamate macrocyclic receptors: synthesis, coordination and electrochemical recognition properties. *Dalton Transactions*, **2005**, 774-81	4.3	56
94	A porphyrin-hexa-peri-hexabenzocoronene-porphyrin triad: synthesis, photophysical properties and performance in a photovoltaic device. *Journal of Materials Chemistry*, **2010**, 20, 7005		53
93	Efficient light harvesting of a luminescent solar concentrator using excitation energy transfer from an aggregation-induced emitter. *Physical Chemistry Chemical Physics*, **2014**, 16, 25358-63	3.6	52
92	Single Isomer of Indene-C70 Bisadduct: Isolation and Performance in Bulk Heterojunction Solar Cells. *Chemistry of Materials*, **2014**, 26, 1686-1689	9.6	49
91	Energy Migration in Organic Solar Concentrators with a Molecularly Insulated Perylene Diimide. *Journal of Physical Chemistry C*, **2016**, 120, 12952-12958	3.8	48
90	Liquid crystalline hexa-peri-hexabenzocoronene-diketopyrrolopyrrole organic dyes for photovoltaic applications. *Journal of Materials Chemistry*, **2012**, 22, 21131		48
89	Continuous flow synthesis of fullerene derivatives. *Journal of Organic Chemistry*, **2011**, 76, 3551-6	4.2	48
88	Dinuclear zinc(II) dithiocarbamate macrocycles: ditopic receptors for a variety of guest molecules. *Dalton Transactions*, **2005**, 359-64	4.3	47
87	Synthesis, photophysical, and device properties of novel dendrimers based on a fluorene-hexabenzocoronene (FHBC) core. *Organic Letters*, **2009**, 11, 975-8	6.2	43
86	A Molecular Chameleon for Mapping Subcellular Polarity in an Unfolded Proteome Environment. *Angewandte Chemie - International Edition*, **2020**, 59, 10129-10135	16.4	40
85	Continuous flow synthesis of conjugated polymers. *Chemical Communications*, **2012**, 48, 1598-600	5.8	39
84	Synthesis of electron-poor hexa-peri-hexabenzocoronenes. *Chemical Communications*, **2012**, 48, 8066-8	5.8	39
83	Regio- and diastereoselective synthesis of bis- and tetrakisadducts of C70 by directed remote functionalization using Tröger base tethers. *Chemistry - A European Journal*, **2006**, 12, 3463-71	4.8	37
82	Electron deficient conjugated polymers based on benzotriazole. *Polymer Chemistry*, **2013**, 4, 1077-1083	4.9	35
81	Orthogonal processing and patterning enabled by highly fluorinated light-emitting polymers. *Advanced Materials*, **2011**, 23, 735-9	24	35
80	Polythiophene–perylene diimide heterojunction field-effect transistors. *Journal of Materials Chemistry C*, **2013**, 1, 2433	7.1	32
79	Development of a High-Performance Donor–Acceptor Conjugated Polymer: Synergy in Materials and Device Optimization. *Chemistry of Materials*, **2016**, 28, 3481-3487	9.6	32

78	Acyclic and macrocyclic transition metal dithiocarbamate complexes containing imidazolium moieties for anion binding. *Polyhedron*, **2004**, 23, 2821-2829	2.7	31
77	Aggregation-induced emission-mediated spectral downconversion in luminescent solar concentrators. *Materials Chemistry Frontiers*, **2018**, 2, 615-619	7.8	30
76	Intramolecular Versus Intermolecular Triplet Fusion in Multichromophoric Photochemical Upconversion. *Journal of Physical Chemistry C*, **2019**, 123, 20181-20187	3.8	29
75	A Green Route to Conjugated Polyelectrolyte Interlayers for High-Performance Solar Cells. *Angewandte Chemie - International Edition*, **2017**, 56, 8431-8434	16.4	28
74	Fluorenyl hexa-peri-hexabenzocoronene-dendritic oligothiophene hybrid materials: synthesis, photophysical properties, self-association behaviour and device performance. *Chemistry - A European Journal*, **2011**, 17, 5549-60	4.8	25
73	Ambipolar hexa-peri-hexabenzocoronene-fullerene hybrid materials. *Organic Letters*, **2010**, 12, 5000-3	6.2	25
72	Benzotriazole-based donor–acceptor conjugated polymers with a broad absorption in the visible range. *Polymer Chemistry*, **2014**, 5, 1258-1263	4.9	24
71	Controlled synthesis of poly(3-hexylthiophene) in continuous flow. *Beilstein Journal of Organic Chemistry*, **2013**, 9, 1492-500	2.5	24
70	The effect of molecule size and shape on free charge generation, transport and recombination in all-thiophene dendrimer:fullerene bulk heterojunctions. *Organic Electronics*, **2010**, 11, 573-582	3.5	24
69	AIE conjugated polyelectrolytes based on tetraphenylethene for efficient fluorescence imaging and lifetime imaging of living cells. *Polymer Chemistry*, **2017**, 8, 3862-3866	4.9	23
68	A Transparent Planar Concentrator Using Aggregates of gem-Pyrene Ethenes. *Advanced Energy Materials*, **2015**, 5, 1500818	21.8	23
67	A Maleimide-functionalized Tetraphenylethene for Measuring and Imaging Unfolded Proteins in Cells. *Chemistry - an Asian Journal*, **2019**, 14, 904-909	4.5	22
66	Hydrogen bonding in bulk heterojunction solar cells: a case study. *Scientific Reports*, **2014**, 4, 5701	4.9	21
65	High-Performance Large-Area Luminescence Solar Concentrator Incorporating a Donor–Emitter Fluorophore System. *ACS Energy Letters*, **2019**, 4, 1839-1844	20.1	21
64	Thiazolyl substituted benzodithiophene copolymers: synthesis, properties and photovoltaic applications. *Journal of Materials Chemistry C*, **2014**, 2, 1306-1313	7.1	21
63	High performance p-type molecular electron donors for OPV applications via alkylthiophene catenation chromophore extension. *Beilstein Journal of Organic Chemistry*, **2016**, 12, 2298-2314	2.5	21
62	Continuous Flow Synthesis of Organic Electronic Materials – Case Studies in Methodology Translation and Scale-up. *Australian Journal of Chemistry*, **2013**, 66, 151	1.2	20
61	One-pot selective synthesis of a fullerene bisadduct for organic solar cell applications. *Chemical Communications*, **2015**, 51, 9837-40	5.8	19

60	Morphology change and improved efficiency in organic photovoltaics via hexa-peri-hexabenzocoronene templates. *ACS Applied Materials & Interfaces*, **2014**, 6, 8824-35	9.5	17
59	Optically monitored spray coating system for the controlled deposition of the photoactive layer in organic solar cells. *Applied Physics Letters*, **2015**, 106, 033302	3.4	16
58	Fullerene peapod nanoparticles as an organic semiconductor-electrode interface layer. *Chemical Communications*, **2016**, 52, 3356-9	5.8	16
57	Acid-diffusion behaviour in organic thin films and its effect on patterning. *Journal of Materials Chemistry*, **2009**, 19, 2986		16
56	Manipulating active layer morphology of molecular donor/polymer acceptor based organic solar cells through ternary blends. *Science China Chemistry*, **2018**, 61, 1025-1033	7.9	16
55	Determinants of the efficiency of photon upconversion by triplet-triplet annihilation in the solid state: zinc porphyrin derivatives in PVA. *Physical Chemistry Chemical Physics*, **2017**, 19, 23471-23482	3.6	15
54	Highly Fluorescent Pyridinium Betaines for Light Harvesting. *Angewandte Chemie - International Edition*, **2017**, 56, 13882-13886	16.4	15
53	Application of Triplet-Triplet Annihilation Upconversion in Organic Optoelectronic Devices: Advances and Perspectives. *Advanced Materials*, **2021**, 33, e2100704	24	15
52	Consensus statement: Standardized reporting of power-producing luminescent solar concentrator performance. *Joule*, **2022**, 6, 8-15	27.8	14
51	Molecularly isolated perylene diimides enable both strong exciton–photon coupling and high photoluminescence quantum yield. *Journal of Materials Chemistry C*, **2019**, 7, 2954-2960	7.1	13
50	Plasma deposition of organic polymer films for solar cell applications. *Organic Electronics*, **2016**, 32, 78-82	3.5	13
49	Photophysics and aggregation effects of a triphenylamine-based dye sensitizer on metal-oxide nanoparticles suspended in an ion trap. *Physical Chemistry Chemical Physics*, **2013**, 15, 20326-32	3.6	13
48	Solution Processable Monosubstituted Hexa-Peri-Hexabenzocoronene Self-Assembling Dyes. *Advanced Functional Materials*, **2012**, 22, 2015-2026	15.6	13
47	Highly Efficient Luminescent Solar Concentrators by Selective Alignment of Donor–Emitter Fluorophores. *Chemistry of Materials*, **2019**, 31, 3001-3008	9.6	12
46	Bulk heterojunction nanomorphology of fluorenyl hexa-peri-hexabenzocoronene-fullerene blend films. *ACS Applied Materials & Interfaces*, **2013**, 5, 11554-62	9.5	12
45	Tetraphenylethene 9,10-Diphenylanthracene Derivatives - Synthesis and Photophysical Properties. *ChemPlusChem*, **2019**, 84, 746-753	2.8	11
44	Molecular doped organic semiconductor crystals for optoelectronic device applications. *Journal of Materials Chemistry C*, **2020**, 8, 14996-15008	7.1	11
43	A Green Route to Conjugated Polyelectrolyte Interlayers for High-Performance Solar Cells. *Angewandte Chemie*, **2017**, 129, 8551-8554	3.6	10

42	Regioselective synthesis of fullerene multiadducts via tether-directed 1,3-dipolar cycloaddition. *Organic and Biomolecular Chemistry*, **2015**, 13, 10505-10	3.9	10
41	Optimising molecular rotors to AIE fluorophores for mitochondria uptake and retention. *Chemical Communications*, **2020**, 56, 14853-14856	5.8	10
40	Synthesis and photovoltaic properties of thieno[3,2-b]thiophenyl substituted benzo[1,2-b:4,5-b?]dithiophene copolymers. *Polymer Chemistry*, **2014**, 5, 6710-6717	4.9	10
39	Detection of Urinary Albumin Using a "Turn-on" Fluorescent Probe with Aggregation-Induced Emission Characteristics. *Chemistry - an Asian Journal*, **2021**, 16, 1245-1252	4.5	10
38	Tetrabenzo[5.7]fulvalene: a forgotten aggregation induced-emission luminogen. *Chemical Communications*, **2019**, 55, 11591-11594	5.8	9
37	Triplet fusion upconversion using sterically protected 9,10-diphenylanthracene as the emitter. *Physical Chemistry Chemical Physics*, **2020**, 22, 6300-6307	3.6	9
36	Bulk-Heterojunction Organic Solar Cells Based on Benzobisthiadiazole Semiconducting Polymers. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2015**, 28, 385-391	0.7	9
35	Competitive Triplet Formation and Recombination in Crystalline Films of Perylenediimide Derivatives: Implications for Singlet Fission. *Journal of Physical Chemistry C*, **2020**, 124, 11574-11585	3.8	8
34	Controlled Synthesis of Well-Defined Semiconducting Brush Polymers. *Macromolecular Chemistry and Physics*, **2016**, 217, 403-413	2.6	8
33	Semi-perfluoroalkyl polyfluorene with varying fluorine content: synthesis and photophysical properties. *Polymer Chemistry*, **2013**, 4, 5291	4.9	8
32	A Molecular Chameleon for Mapping Subcellular Polarity in an Unfolded Proteome Environment. *Angewandte Chemie*, **2020**, 132, 10215-10221	3.6	8
31	Detection of Halomethanes Using Cesium Lead Halide Perovskite Nanocrystals. *ACS Nano*, **2021**, 15, 14546-14648	16.7	8
30	A luminescent solar concentrator ray tracing simulator with a graphical user interface: features and applications. *Methods and Applications in Fluorescence*, **2020**, 8, 037001	3.1	6
29	FRET-enhanced photoluminescence of perylene diimides by combining molecular aggregation and insulation. *Journal of Materials Chemistry C*, **2020**, 8, 8953-8961	7.1	6
28	Self-assembled xanthate-transition metal polyether macrocycles and cryptands. *Polyhedron*, **2003**, 22, 795-801	2.7	6
27	Organic polariton lasing with molecularly isolated perylene diimides. *Applied Physics Letters*, **2020**, 117, 041103	3.4	5
26	A water-soluble, AIE-active polyelectrolyte for conventional and fluorescence lifetime imaging of mouse neuroblastoma neuro-2A cells. *Journal of Polymer Science Part A*, **2018**, 56, 672-680	2.5	5
25	The synthesis and purification of amphiphilic conjugated donor–acceptor block copolymers. *Polymer Journal*, **2017**, 49, 155-161	2.7	5

24	Organic Photovoltaic Materials--Design, Synthesis and Scale-Up. *Chemical Record*, **2015**, 15, 1006-20	6.6	5
23	Revealing the Interfacial Photoreduction of MoO3 with P3HT from the Molecular Weight-Dependent Burn-In Degradation of P3HT:PC61BM Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 9714-9723	6.1	5
22	Separation and identification of indene-C70 bisadduct isomers. *Beilstein Journal of Organic Chemistry*, **2016**, 12, 903-11	2.5	5
21	The performance of conjugated polymers as emitters for triplet–triplet annihilation upconversion. *Materials Advances*, **2021**, 2, 2031-2035	3.3	5
20	Correlation of charge extraction properties and short circuit current in various organic binary and ternary blend photovoltaic devices. *Applied Physics A: Materials Science and Processing*, **2012**, 108, 515-520	2.6	4
19	Exciton Dynamics of Photoexcited Pendant Porphyrin Polymers in Solution and in Thin Films. *Journal of Physical Chemistry A*, **2018**, 122, 9605-9614	2.8	4
18	Simulations of Luminescent Solar Concentrator Bifacial Photovoltaic Mosaic Devices Containing Four Different Organic Luminophores. *IEEE Journal of Photovoltaics*, **2022**, 1-7	3.7	4
17	Measured power conversion efficiencies of bifacial luminescent solar concentrator photovoltaic devices of the mosaic series. *Progress in Photovoltaics: Research and Applications*,	6.8	4
16	Simple improvements to Gilch synthesis and molecular weight modulation of MEH-PPV. *Polymer Chemistry*, **2020**, 11, 2831-2837	4.9	3
15	Bilirubin analogues as model compounds for exciton coupling. *Physical Chemistry Chemical Physics*, **2020**, 22, 15567-15572	3.6	3
14	Poly(dibenzosilole)s **2008**, 85-98		3
13	Unusual Alternating Crystallization-Induced Emission Enhancement Behavior in Nonconjugated Phenylalkyl Tropylium Salts. *Journal of the American Chemical Society*, **2021**, 143, 20384-20394	16.4	3
12	Hoch fluoreszierende Pyridiniumbetaine für die Lichtsammlung. *Angewandte Chemie*, **2017**, 129, 14070-14074	3.6	2
11	Limitations of conjugated polymers as emitters in triplet–triplet annihilation upconversion. *Materials Advances*,	3.3	2
10	Amine-Substituted Diazocine Derivatives: Synthesis, Structure, and Photophysical Properties. *Helvetica Chimica Acta*, **2018**, 101, e1800146	2	2
9	Pyridine End-Capped Polymer to Stabilize Organic Nanoparticle Dispersions for Solar Cell Fabrication through Reversible Pyridinium Salt Formation. *ACS Applied Materials & Interfaces*, **2021**, 13, 36044-36052	9.5	2
8	Revealing the influence of steric bulk on the triplet-triplet annihilation upconversion performance of conjugated polymers. *Scientific Reports*, **2021**, 11, 19585	4.9	2
7	Polycyclic aromatic hydrocarbons for organic photovoltaics **2011**,		1

6	Aggregation-Induced Emitters in Light Harvesting **2019**, 479-504		1
5	Synthesis and Solvatochromic Behavior of Zwitterionic Donor–Bridge–Acceptor Systems with Oligo(p-phenylene) Spacers. *Organic Materials*, **2021**, 03, 103-118	1.9	1
4	Morphology changes in bulk donor–acceptor poly(benzodithiophene-benzotriazole) after post-treatment. *Journal of Polymer Science, Part B: Polymer Physics*, **2016**, 54, 2327-2334	2.6	1
3	Continuous Flow Synthesis of Conjugated Polymers and Carbon Materials159-181		1
2	Sensing, Templation and Self-Assembly by Macrocyclic Ligand Systems **2005**, 105-119		1
1	Theoretical Aspects of Iterative Coupling for Linear Oligomers and Polymers. *Macromolecular Theory and Simulations*, **2020**, 29, 1900048	1.5	