Chih-Hao Chang

List of Publications by Year
in descending order

83 papers	3,742 citations	117625 34 h-index	128289 60 g-index
88 all docs	88 docs citations	88 times ranked	2763 citing authors

#	Article	IF	Citations
1	Blue-Emitting Heteroleptic Iridium(III) Complexes Suitable for High-Efficiency Phosphorescent OLEDs. Angewandte Chemie - International Edition, 2007, 46, 2418-2421.	13.8	396
2	Highly Efficient Blueâ€Emitting Iridium(III) Carbene Complexes and Phosphorescent OLEDs. Angewandte Chemie - International Edition, 2008, 47, 4542-4545.	13.8	382
3	En Route to High External Quantum Efficiency (âˆ¼12%), Organic Trueâ€Blueâ€Lightâ€Emitting Diodes Employing Novel Design of Iridium (III) Phosphors. Advanced Materials, 2009, 21, 2221-2225.	21.0	195
4	Iridium(III) Complexes of a Dicyclometalated Phosphite Tripod Ligand: Strategy to Achieve Blue Phosphorescence Without Fluorine Substituents and Fabrication of OLEDs. Angewandte Chemie - International Edition, 2011, 50, 3182-3186.	13.8	128
5	Enhancing light outcoupling of organic light-emitting devices by locating emitters around the second antinode of the reflective metal electrode. Applied Physics Letters, 2006, 88, 081114.	3.3	125
6	A dicarbazoleâ€“triazine hybrid bipolar host material for highly efficient green phosphorescent OLEDs. Journal of Materials Chemistry, 2012, 22, 3832.	6.7	116
7	Enhanced electroluminescence based on thermally activated delayed fluorescence from a carbazoleâ€“triazine derivative. Physical Chemistry Chemical Physics, 2013, 15, 15850.	2.8	115
8	A diarylborane-substituted carbazole as a universal bipolar host material for highly efficient electrophosphorescence devices. Journal of Materials Chemistry, 2012, 22, 870-876.	6.7	96
9	A New Class of Sky-Blue-Emitting Ir(III) Phosphors Assembled Using Fluorine-Free Pyridyl Pyrimidine Cyclometalates: Application toward High-Performance Sky-Blue- and White-Emitting OLEDs. ACS Applied Materials & Interfaces, 2013, 5, 7341-7351.	8.0	90
10	Pt(II) Metal Complexes Tailored with a Newly Designed Spiro-Arranged Tetradentate Ligand; Harnessing of Charge-Transfer Phosphorescence and Fabrication of Sky Blue and White OLEDs. Inorganic Chemistry, 2015, 54, 4029-4038.	4.0	87
11	Efficient phosphorescent white OLEDs with high color rendering capability. Organic Electronics, 2010, 11, 412-418.	2.6	83
12	Optically Triggered Planarization of Boryl-Substituted Phenoxazine: Another Horizon of TADF Molecules and High-Performance OLEDs. ACS Applied Materials & Interfaces, 2018, 10, 12886-12896.	8.0	75
13	High-color-rendering pure-white phosphorescent organic light-emitting devices employing only two complementary colors. Organic Electronics, 2010, 11, 266-272.	2.6	72
14	Blue-emitting Ir(iii) phosphors with 2-pyridyl triazolate chromophores and fabrication of sky blue- and white-emitting OLEDs. Journal of Materials Chemistry C, 2013, 1, 2639.	5.5	69
15	Bis-Tridentate Iridium(III) Phosphors Bearing Functional 2-Phenyl-6-(imidazol-2-ylidene)pyridine and 2-(Pyrazol-3-yl)-6-phenylpyridine Chelates for Efficient OLEDs. Organometallics, 2016, 35, 1813-1824.	2.3	63
16	Fourfold power efficiency improvement in organic light-emitting devices using an embedded nanocomposite scattering layer. Organic Electronics, 2012, 13, 1073-1080.	2.6	58
17	Heteroleptic Ir(<scp>iii</scp>) phosphors with bis-tridentate chelating architecture for high efficiency OLEDs. Journal of Materials Chemistry C, 2015, 3, 3460-3471.	5.5	55
18	First N-Borylated Emitters Displaying Highly Efficient Thermally Activated Delayed Fluorescence and High-Performance OLEDs. ACS Applied Materials & Interfaces, 2017, 9, 27090-27101.	8.0	54

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19	Efficient phosphorescent white organic light-emitting devices incorporating blue iridium complex and multifunctional orangeâ€“red osmium complex. Organic Electronics, 2009, 10, 1235-1240.	2.6	53
20	Phosphorescent OLEDs assembled using Os(ii) phosphors and a bipolar host material consisting of both carbazole and dibenzophosphole oxide. Journal of Materials Chemistry, 2012, 22, 10684.	6.7	53
21	Unprecedented Homoleptic Bisâ€Tridentate Iridium(III) Phosphors: Facile, Scaledâ€Up Production, and Superior Chemical Stability. Advanced Functional Materials, 2017, 27, 1702856.	14.9	53
22	Near infrared-emitting tris-bidentate Os(ii) phosphors: control of excited state characteristics and fabrication of OLEDs. Journal of Materials Chemistry C, 2015, 3, 4910-4920.	5.5	52
23	Sky-blue aggregation-induced emission molecules for non-doped organic light-emitting diodes. Journal of Materials Chemistry C, 2017, 5, 6054-6060.	5.5	49
24	Isomeric spiro-[acridine-9,9â€²-fluorene]-2,6-dipyridylpyrimidine based TADF emitters: insights into photophysical behaviors and OLED performances. Journal of Materials Chemistry C, 2018, 6, 10088-10100.	5.5	46
25	Enhancing device efficiencies of solid-state white light-emitting electrochemical cells by employing waveguide coupling. Journal of Materials Chemistry C, 2015, 3, 5665-5673.	5.5	45
26	Efficient iridium(III) based, true-blue emitting phosphorescent OLEDS employing both double emission and double buffer layers. Organic Electronics, 2009, 10, 1364-1371.	2.6	44
27	Phenyl- and Pyrazolyl-Functionalized Pyrimidine: Versatile Chromophore of Bis-Tridentate Ir(III) Phosphors for Organic Light-Emitting Diodes. Chemistry of Materials, 2019, 31, 6453-6464.	6.7	44
28	Solid-state light-emitting electrochemical cells employing phosphor-sensitized fluorescence. Journal of Materials Chemistry, 2010, 20, 5521.	6.7	43
29	Highly efficient blue and deep-blue emitting zwitterionic iridium(iii) complexes: synthesis, photophysics and electroluminescence. Journal of Materials Chemistry C, 2014, 2, 2569.	5.5	42
30	Luminescent Pt(<scp>ii</scp>) complexes featuring imidazolylideneâ€“pyridylidene and dianionic bipyrazolate: from fundamentals to OLED fabrications. Journal of Materials Chemistry C, 2017, 5, 1420-1435.	5.5	37
31	Ir(III)-Based Phosphors with Bipyrazolate Ancillaries; Rational Design, Photophysics, and Applications in Organic Light-Emitting Diodes. Inorganic Chemistry, 2015, 54, 10811-10821.	4.0	36
32	Os(<scp>ii</scp>) metal phosphors bearing tridentate 2,6-di(pyrazol-3-yl)pyridine chelate: synthetic design, characterization and application in OLED fabrication. Journal of Materials Chemistry C, 2014, 2, 6269.	5.5	34
33	Phenanthro[9,10-d]imidazole based new host materials for efficient red phosphorescent OLEDs. Dyes and Pigments, 2017, 137, 615-621.	3.7	34
34	Luminescent Diiridium Complexes with Bridging Pyrazolates: Characterization and Fabrication of OLEDs Using Vacuum Thermal Deposition. Advanced Optical Materials, 2018, 6, 1800083.	7.3	34
35	Roles of Ancillary Chelates and Overall Charges of Bis-tridentate Ir(III) Phosphors for OLED Applications. ACS Applied Materials & Interfaces, 2020, 12, 1084-1093.	8.0	31
36	Efficient donor-acceptor-donor borylated compounds with extremely small Î”EST for thermally activated delayed fluorescence OLEDs. Organic Electronics, 2018, 63, 166-174.	2.6	30

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37	Multifunctional carbazolocarbazoles as hole transporting and emitting host materials in red phosphorescent OLEDs. Journal of Materials Chemistry C, 2013, 1, 3421.	5.5	29
38	Combinational Approach To Realize Highly Efficient Light-Emitting Electrochemical Cells. ACS Applied Materials & Interfaces, 2020, 12, 14254-14264.	8.0	28
39	Controlling through-space and through-bond intramolecular charge transfer in bridged Dâ€"Dâ€²â€"A TADF emitters. Journal of Materials Chemistry C, 2021, 9, 8819-8833.	5.5	27
40	Solid-state white light-emitting electrochemical cells based on scattering red color conversion layers. Journal of Materials Chemistry C, 2015, 3, 12492-12498.	5.5	26
41	Thiazoline Carbeneâ€"Cu(I)â€"Amide complexes: Efficient White Electroluminescence from Combined Monomer and Excimer Emission. ACS Applied Materials & Interfaces, 2022, 14, 15478-15493.	8.0	25
42	Using lithium carbonate-based electron injection structures in high-performance inverted organic light-emitting diodes. Physical Chemistry Chemical Physics, 2015, 17, 13123-13128.	2.8	21
43	Facile Generation of Thermally Activated Delayed Fluorescence and Fabrication of Highly Efficient Nonâ€Doped OLEDs Based on Triazine Derivatives. Chemistry - A European Journal, 2019, 25, 16699-16711.	3.3	21
44	Triarylboryl-substituted carbazoles as bipolar host materials for efficient green phosphorescent organic light-emitting devices. Dyes and Pigments, 2019, 163, 145-152.	3.7	21
45	Aligned energy-level design for decreasing operation voltage of tandem white organic light-emitting diodes. Thin Solid Films, 2013, 548, 389-397.	1.8	20
46	Enhancing extracted electroluminescence from light-emitting electrochemical cells by employing high-refractive-index substrates. Organic Electronics, 2017, 51, 149-155.	2.6	20
47	Highly efficient blue and white light-emitting electrochemical cells employing substrates containing embedded diffusive layers. Organic Electronics, 2020, 77, 105515.	2.6	20
48	Dicyano-Imidazole-Based Host Materials Possessing a Balanced Bipolar Nature To Realize Efficient OLEDs with Extremely High Luminance. Journal of Physical Chemistry C, 2020, 124, 20410-20423.	3.1	20
49	Naphthyl substituted triphenylamine derivatives as hole transporting materials for efficient red PhOLEDs. Dyes and Pigments, 2019, 162, 196-202.	3.7	19
50	Dicyanoâ€Imidazole: A Facile Generation of Pure Blue TADF Materials for OLEDs. Chemistry - A European Journal, 2021, 27, 12998-13008.	3.3	19
51	Achieving three-peak white organic light-emitting devices using wavelength-selective mirror electrodes. Applied Physics Letters, 2008, 92, 123303.	3.3	18
52	Ga-doped TiZnO transparent conductive oxide used as an alternative anode in blue, green, and red phosphorescent OLEDs. Physical Chemistry Chemical Physics, 2014, 16, 19618-19624.	2.8	18
53	Aggregation-induced emission tetraphenylethene type derivatives for blue tandem organic light-emitting diodes. Organic Electronics, 2019, 67, 279-286.	2.6	16
54	Efficient red, green, blue and white organic light-emitting diodes with same exciplex host. Japanese Journal of Applied Physics, 2016, 55, 03CD02.	1.5	15

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55	Highly efficient flexible organic light-emitting diodes based on a high-temperature durable mica substrate. Organic Electronics, 2019, 75, 105442.	2.6	14
56	Carbazole/triphenylamine-cyanobenzimidazole hybrid bipolar host materials for green phosphorescent organic light-emitting diodes. Organic Electronics, 2021, 92, 106090.	2.6	14
57	Imidazolylâ€Phenylcarbazoleâ€Based Host Materials and Their Use for Coâ€host Designs in Phosphorescent OLEDs. Chemistry - A European Journal, 2022, 28, .	3.3	14
58	Naphthyl or pyrenyl substituted 2-phenylcarbazoles as hole transporting materials for organic light-emitting diodes. Dyes and Pigments, 2017, 136, 302-311.	3.7	13
59	Role of the Diphosphine Chelate in Emissive, Chargeâ€Neutral Iridium(III) Complexes. Chemistry - A European Journal, 2018, 24, 624-635.	3.3	12
60	Pure exciplex-based white organic light-emitting diodes with imitation daylight emissions. RSC Advances, 2018, 8, 30582-30588.	3.6	12
61	Approach to Fast Screen the Formation of an Exciplex. Journal of Physical Chemistry C, 2020, 124, 10175-10184.	3.1	11
62	Mo-doped GZO films used as anodes or cathodes for highly efficient flexible blue, green and red phosphorescent organic light-emitting diodes. Journal of Materials Chemistry C, 2015, 3, 12048-12055.	5.5	10
63	A Method to Realize Efficient Deep-Red Phosphorescent OLEDs with a Broad Spectral Profile and Low Operating Voltages. Materials, 2021, 14, 5723.	2.9	10
64	Triphenylethene-carbazole-based molecules for the realization of blue and white aggregation-induced emission OLEDs with high luminance. Organic Electronics, 2022, 108, 106571.	2.6	8
65	(Bi)phenyl substituted 9-(2,2-diphenylvinyl)carbazoles as low cost hole transporting materials for efficient red PhOLEDs. Dyes and Pigments, 2018, 159, 173-178.	3.7	7
66	An alternative composite electrode for efficient organic light-emitting diodes. Organic Electronics, 2020, 85, 105844.	2.6	7
67	Flexible light-emitting electrochemical cells on muscovite mica substrates. Organic Electronics, 2021, 96, 106218.	2.6	7
68	Carbazole-pyridine pyrroloquinoxaline/benzothiadiazine 1,1-dioxide based bipolar hosts for efficient red PhOLEDs. Organic Electronics, 2021, 96, 106217.	2.6	7
69	Efficient blue and green phosphorescent OLEDs with host material containing electronically isolated carbazolyl fragments. Optical Materials, 2018, 79, 446-449.	3.6	5
70	Realizing performance improvement of borylated TADF materials for OLEDs. Dyes and Pigments, 2022, 197, 109892.	3.7	5
71	Harnessing bipolar acceptors for highly efficient exciplex-forming systems. Journal of Materials Chemistry C, 2022, 10, 4748-4756.	5.5	5
72	Design and Synthesis of Novel Phenothiazineâ€Benzothiadiazineâ€1,1â€dioxide Hybrid Organic Material for OLED Applications. ChemistrySelect, 2021, 6, 11029-11038.	1.5	4

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73	Electrochemical and resonance Raman studies of nitridomanganese(V) porphyrins in nonaqueous solution. Journal of Porphyrins and Phthalocyanines, 2003, 07, 674-681.	0.8	2
74	64.3: Highâ€Efficiency Phosphorescent White OLEDs Using Redâ€Emitting Osmium Complex and Blueâ€Emitting Iridium Complex. Digest of Technical Papers SID International Symposium, 2007, 38, 1772-1775.	0.3	2
75	35.4: Enhancing Light Outcoupling of Organic Light-Emitting Devices by Locating Emitters around the Second Antinode of the Reflective Metal Electrode. Digest of Technical Papers SID International Symposium, 2006, 37, 1380.	0.3	1
76	Pâ€152: Efficient Blue Phosphorescent OLEDs Employing Novel Oligocarbazoles as Highâ€Tripletâ€Energy Host Materials. Digest of Technical Papers SID International Symposium, 2007, 38, 772-775.	0.3	1
77	Pâ€212: Architecture Design for Efficient Trueâ€Blue Phosphorescent OLEDs. Digest of Technical Papers SID International Symposium, 2008, 39, 2005-2007.	0.3	1
78	Improving the efficiency of white OLEDs based on a gradient refractive index substrate. , 2015, , .		1
79	Production of efficient exciplex-based red, green, blue and white organic light-emitting diodes. , 2015, , .		1
80	29.1: 200 cd/A Microcavity Two-Unit Tandem Organic Light-Emitting Devices. Digest of Technical Papers SID International Symposium, 2006, 37, 1284.	0.3	0
81	Pâ€154: Efficient White OLEDs Employing Phosphorescent Sensitization. Digest of Technical Papers SID International Symposium, 2007, 38, 780-783.	0.3	0
82	25.2: Achieving Three-Peak White Organic Light-Emitting Devices Using Wavelength-Selective Mirror Electrodes. Digest of Technical Papers SID International Symposium, 2007, 38, 1110-1113.	0.3	0
83	Efficient red phosphorescent OLEDs employing 2-phenylcarbazoles-based hole transport materials. , 2016, , .		0