# Mark E Thompson

#### List of Publications by Citations

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96 196 278 39,323 h-index g-index citations papers 10 41,742 7.21 299 L-index ext. citations ext. papers avg, IF

| #   | Paper   | IF   | Citations |
|-----|---|------|-----------|
| 278 | Nearly 100% internal phosphorescence efficiency in an organic light-emitting device. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 5048-5051  | 2.5  | 2883      |
| 277 | Highly phosphorescent bis-cyclometalated iridium complexes: synthesis, photophysical characterization, and use in organic light emitting diodes. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 4304-12 | 16.4 | 2408      |
| 276 | Management of singlet and triplet excitons for efficient white organic light-emitting devices. <i>Nature</i> , <b>2006</b> , 440, 908-12  | 50.4 | 1995      |
| 275 | Synthesis and characterization of phosphorescent cyclometalated iridium complexes. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 1704-11   | 5.1  | 1113      |
| 274 | Synthesis and characterization of facial and meridional tris-cyclometalated iridium(III) complexes. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 7377-87  | 16.4 | 1097      |
| 273 | Continuous, highly flexible, and transparent graphene films by chemical vapor deposition for organic photovoltaics. <i>ACS Nano</i> , <b>2010</b> , 4, 2865-73  | 16.7 | 1052      |
| 272 | Endothermic energy transfer: A mechanism for generating very efficient high-energy phosphorescent emission in organic materials. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 2082-2084                                 | 3.4  | 953       |
| 271 | High-efficiency organic electrophosphorescent devices with tris(2-phenylpyridine)iridium doped into electron-transporting materials. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 904-906                               | 3.4  | 929       |
| 270 | Synthesis and characterization of phosphorescent cyclometalated platinum complexes. <i>Inorganic Chemistry</i> , <b>2002</b> , 41, 3055-66  | 5.1  | 927       |
| 269 | High-efficiency red electrophosphorescence devices. <i>Applied Physics Letters</i> , <b>2001</b> , 78, 1622-1624  | 3.4  | 621       |
| 268 | Introduction: Organic Electronics and Optoelectronics. <i>Chemical Reviews</i> , <b>2007</b> , 107, 923-925   | 68.1 | 620       |
| 267 | Synthetic control of excited-state properties in cyclometalated Ir(III) complexes using ancillary ligands. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 1713-27   | 5.1  | 606       |
| 266 | Hydroxylated quantum dots as luminescent probes for in situ hybridization. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 4103-4  | 16.4 | 580       |
| 265 | Blue and near-UV phosphorescence from iridium complexes with cyclometalated pyrazolyl or N-heterocyclic carbene ligands. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 7992-8003   | 5.1  | 573       |
| 264 | Deep blue phosphorescent organic light-emitting diodes with very high brightness and efficiency. <i>Nature Materials</i> , <b>2016</b> , 15, 92-8   | 27   | 539       |
| 263 | Cationic bis-cyclometalated iridium(III) diimine complexes and their use in efficient blue, green, and red electroluminescent devices. <i>Inorganic Chemistry</i> , <b>2005</b> , 44, 8723-32                                 | 5.1  | 533       |
| 262 | Three-Color, Tunable, Organic Light-Emitting Devices. <i>Science</i> , <b>1997</b> , 276, 2009-2011   | 33.3 | 522       |

# (2011-2009)

| 261 | Temperature dependence of blue phosphorescent cyclometalated Ir(III) complexes. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 9813-22   | 16.4  | 482 |
|-----|--|-------|-----|
| 260 | Molecular and morphological influences on the open circuit voltages of organic photovoltaic devices. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 9281-6   | 16.4  | 463 |
| 259 | Ultrahigh Energy Gap Hosts in Deep Blue Organic Electrophosphorescent Devices. <i>Chemistry of Materials</i> , <b>2004</b> , 16, 4743-4747   | 9.6   | 450 |
| 258 | High efficiency single dopant white electrophosphorescent light emitting diodes. <i>New Journal of Chemistry</i> , <b>2002</b> , 26, 1171-1178   | 3.6   | 450 |
| 257 | Enhanced open-circuit voltage in subphthalocyanine/C60 organic photovoltaic cells. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 8108-9   | 16.4  | 428 |
| 256 | From Molecules to Materials: Current Trends and Future Directions. <i>Advanced Materials</i> , <b>1998</b> , 10, 1297  | -1436 | 390 |
| 255 | Synthesis and structure of (cis)-[1-ferrocenyl-2-(4-nitrophenyl)ethylene], an organotransition metal compound with a large second-order optical nonlinearity. <i>Nature</i> , <b>1987</b> , 330, 360-362                                 | 50.4  | 369 |
| 254 | Complementary detection of prostate-specific antigen using In2O3 nanowires and carbon nanotubes. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 12484-5  | 16.4  | 336 |
| 253 | Measurement of the lowest unoccupied molecular orbital energies of molecular organic semiconductors. <i>Organic Electronics</i> , <b>2009</b> , 10, 515-520  | 3.5   | 329 |
| 252 | Asymmetric Triaryldiamines as Thermally Stable Hole Transporting Layers for Organic Light-Emitting Devices. <i>Chemistry of Materials</i> , <b>1998</b> , 10, 2235-2250  | 9.6   | 320 |
| 251 | New charge-carrier blocking materials for high efficiency OLEDs. <i>Organic Electronics</i> , <b>2003</b> , 4, 77-87   | 3.5   | 312 |
| 250 | Phosphorescence versus thermally activated delayed fluorescence. Controlling singlet-triplet splitting in brightly emitting and sublimable Cu(I) compounds. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 16032-8 | 16.4  | 305 |
| 249 | Solution-phase synthesis of SnSe nanocrystals for use in solar cells. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 4060-1  | 16.4  | 280 |
| 248 | Efficient, Saturated Red Organic Light Emitting Devices Based on Phosphorescent Platinum(II) Porphyrins. <i>Chemistry of Materials</i> , <b>1999</b> , 11, 3709-3713   | 9.6   | 279 |
| 247 | Eliminating nonradiative decay in Cu(I) emitters: >99% quantum efficiency and microsecond lifetime. <i>Science</i> , <b>2019</b> , 363, 601-606  | 33.3  | 271 |
| 246 | Synthetic control of PtPt separation and photophysics of binuclear platinum complexes. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 28-9   | 16.4  | 270 |
| 245 | Platinum-functionalized random copolymers for use in solution-processible, efficient, near-white organic light-emitting diodes. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 15388-9                             | 16.4  | 263 |
| 244 | Solvent-Annealed Crystalline Squaraine: PC70BM (1:6) Solar Cells. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 184-187  | 21.8  | 242 |

| 243 | Efficient singlet fission discovered in a disordered acene film. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 6388-400   | 16.4 | 239 |
|-----|--|------|-----|
| 242 | Phosphorescence quenching by conjugated polymers. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 7796-7  | 16.4 | 237 |
| 241 | Stable photoinduced charge separation in layered viologen compounds. <i>Nature</i> , <b>1992</b> , 358, 656-658  | 50.4 | 236 |
| 240 | Hole Transporting Materials with High Glass Transition Temperatures for Use in Organic Light-Emitting Devices. <i>Advanced Materials</i> , <b>1998</b> , 10, 1108-1112                     | 24   | 234 |
| 239 | A codeposition route to CuI-pyridine coordination complexes for organic light-emitting diodes.<br>Journal of the American Chemical Society, <b>2011</b> , 133, 3700-3                      | 16.4 | 227 |
| 238 | Highly efficient, near-infrared electrophosphorescence from a Pt-metalloporphyrin complex. <i>Angewandte Chemie - International Edition</i> , <b>2007</b> , 46, 1109-12                    | 16.4 | 227 |
| 237 | Bis-cyclometalated Ir(III) complexes as efficient singlet oxygen sensitizers. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 14828-9                                 | 16.4 | 226 |
| 236 | 1,8-Naphthalimides in phosphorescent organic LEDs: the interplay between dopant, exciplex, and host emission. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 9945-54 | 16.4 | 224 |
| 235 | High operational stability of electrophosphorescent devices. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 162-164  | 3.4  | 224 |
| 234 | Colloidal Metal Deposition onto Functionalized Polystyrene Microspheres. <i>Chemistry of Materials</i> , <b>1999</b> , 11, 2389-2399   | 9.6  | 219 |
| 233 | Selective functionalization of In2O3 nanowire mat devices for biosensing applications. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 6922-3                         | 16.4 | 218 |
| 232 | Use of Layered Metal Phosphonates for the Design and Construction of Molecular Materials. <i>Chemistry of Materials</i> , <b>1994</b> , 6, 1168-1175                                       | 9.6  | 216 |
| 231 | Dendrimer-Containing Light-Emitting Diodes: Toward Site-Isolation of Chromophores. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 12385-12386                        | 16.4 | 206 |
| 230 | Singlet Fission in a Covalently Linked Cofacial Alkynyltetracene Dimer. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 617-27  | 16.4 | 204 |
| 229 | High-performance polymer light-emitting diodes doped with a red phosphorescent iridium complex. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 2308-2310                               | 3.4  | 204 |
| 228 | A round robin study of flexible large-area roll-to-roll processed polymer solar cell modules. <i>Solar Energy Materials and Solar Cells</i> , <b>2009</b> , 93, 1968-1977                  | 6.4  | 194 |
| 227 | Excimer and electron transfer quenching studies of a cyclometalated platinum complex. <i>Coordination Chemistry Reviews</i> , <b>2005</b> , 249, 1501-1510                                 | 23.2 | 194 |
| 226 | Platinum Binuclear Complexes as Phosphorescent Dopants for Monochromatic and White Organic Light-Emitting Diodes. <i>Advanced Functional Materials</i> , <b>2006</b> , 16, 2438-2446       | 15.6 | 186 |

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| 225 | Simultaneous light emission from a mixture of dendrimer encapsulated chromophores: a model for single-layer multichromophoric organic light-emitting diodes. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 13165-72 | 16.4               | 184 |
|-----|--|--------------------|-----|
| 224 | Understanding and predicting the orientation of heteroleptic phosphors in organic light-emitting materials. <i>Nature Materials</i> , <b>2016</b> , 15, 85-91  | 27                 | 181 |
| 223 | High-efficiency yellow double-doped organic light-emitting devices based on phosphor-sensitized fluorescence. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 1045-1047   | 3.4                | 181 |
| 222 | Improving the performance of conjugated polymer-based devices by control of interchain interactions and polymer film morphology. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 2454-2456  | 3.4                | 171 |
| 221 | Label-free, electrical detection of the SARS virus N-protein with nanowire biosensors utilizing antibody mimics as capture probes. <i>ACS Nano</i> , <b>2009</b> , 3, 1219-24  | 16.7               | 170 |
| 220 | Cyclometalated iridium and platinum complexes as singlet oxygen photosensitizers: quantum yields, quenching rates and correlation with electronic structures. <i>Dalton Transactions</i> , <b>2007</b> , 3763-70                           | 4.3                | 159 |
| 219 | Cyclometalated Ir complexes in polymer organic light-emitting devices. <i>Journal of Applied Physics</i> , <b>2002</b> , 92, 1570-1575   | 2.5                | 156 |
| 218 | Molecularly doped polymer light emitting diodes utilizing phosphorescent Pt(II) and Ir(III) dopants. <i>Organic Electronics</i> , <b>2001</b> , 2, 53-62   | 3.5                | 155 |
| 217 | Hot excited state management for long-lived blue phosphorescent organic light-emitting diodes. <i>Nature Communications</i> , <b>2017</b> , 8, 15566   | 17.4               | 153 |
| 216 | Solution-processed squaraine bulk heterojunction photovoltaic cells. <i>ACS Nano</i> , <b>2010</b> , 4, 1927-34  | 16.7               | 153 |
| 215 | Synthesis and Applications of Palladium-Coated Poly(vinylpyridine) Nanospheres. <i>Chemistry of Materials</i> , <b>2000</b> , 12, 1985-1989  | 9.6                | 146 |
| 214 | Highly Efficient Photo- and Electroluminescence from Two-Coordinate Cu(I) Complexes Featuring Nonconventional N-Heterocyclic Carbenes. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 3576-35                        | 5 <del>8</del> 8·4 | 143 |
| 213 | Singlet and triplet excitation management in a bichromophoric near-infrared-phosphorescent BODIPY-benzoporphyrin platinum complex. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 88-96                              | 16.4               | 139 |
| 212 | Blue light emitting Ir(III) compounds for OLEDs - new insights into ancillary ligand effects on the emitting triplet state. <i>Journal of Physical Chemistry A</i> , <b>2009</b> , 113, 5927-32  | 2.8                | 138 |
| 211 | Efficient dipyrrin-centered phosphorescence at room temperature from bis-cyclometalated iridium(III) dipyrrinato complexes. <i>Inorganic Chemistry</i> , <b>2010</b> , 49, 6077-84   | 5.1                | 135 |
| 210 | Synthesis and characterization of cyclometalated Ir(III) complexes with pyrazolyl ancillary ligands. <i>Polyhedron</i> , <b>2004</b> , 23, 419-428   | 2.7                | 135 |
| 209 | Synthesis and characterization of phosphorescent three-coordinate Cu(I)-NHC complexes. <i>Chemical Communications</i> , <b>2010</b> , 46, 6696-8   | 5.8                | 134 |
| 208 | Living Radical Polymerization of Bipolar Transport Materials for Highly Efficient Light Emitting Diodes. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 386-395   | 9.6                | 130 |

| 207 | Study of ion-paired iridium complexes (soft salts) and their application in organic light emitting diodes. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 3133-9                            | 16.4          | 129 |
|-----|---|---------------|-----|
| 206 | Photophysical properties of cyclometalated Pt(II) complexes: counterintuitive blue shift in emission with an expanded ligand Bystem. <i>Inorganic Chemistry</i> , <b>2013</b> , 52, 12403-15                      | 5.1           | 126 |
| 205 | Efficient, ordered bulk heterojunction nanocrystalline solar cells by annealing of ultrathin squaraine thin films. <i>Nano Letters</i> , <b>2010</b> , 10, 3555-9   | 11.5          | 126 |
| 204 | Cu4I4 clusters supported by P^N-type ligands: new structures with tunable emission colors. <i>Inorganic Chemistry</i> , <b>2012</b> , 51, 230-6   | 5.1           | 123 |
| 203 | The molecular nature of photovoltage losses in organic solar cells. <i>Chemical Communications</i> , <b>2011</b> , 47, 3702-16  | 5.8           | 117 |
| 202 | Porphyrin-tape/c(60) organic photodetectors with 6.5% external quantum efficiency in the near infrared. <i>Advanced Materials</i> , <b>2010</b> , 22, 2780-3  | 24            | 117 |
| 201 | Matrix effects on the triplet state of the OLED emitter Ir(4,6-dFppy)2(pic) (FIrpic): investigations by high-resolution optical spectroscopy. <i>Inorganic Chemistry</i> , <b>2009</b> , 48, 1928-37              | 5.1           | 115 |
| 200 | Symmetry-breaking intramolecular charge transfer in the excited state of meso-linked BODIPY dyads. <i>Chemical Communications</i> , <b>2012</b> , 48, 284-6   | 5.8           | 113 |
| 199 | Emitter Orientation as a Key Parameter in Organic Light-Emitting Diodes. <i>Physical Review Applied</i> , <b>2017</b> , 8,  | 4.3           | 111 |
| 198 | The effects of copper phthalocyanine purity on organic solar cell performance. <i>Organic Electronics</i> , <b>2005</b> , 6, 242-246  | 3.5           | 110 |
| 197 | Independent control of bulk and interfacial morphologies of small molecular weight organic heterojunction solar cells. <i>Nano Letters</i> , <b>2012</b> , 12, 4366-71  | 11.5          | 109 |
| 196 | Efficient photoinduced charge separation in layered zirconium viologen phosphonate compounds.<br>Journal of the American Chemical Society, <b>1993</b> , 115, 11767-11774   | 16.4          | 109 |
| 195 | New Thermally Cross-Linkable Polymer and Its Application as a Hole-Transporting Layer for Solution Processed Multilayer Organic Light Emitting Diodes. <i>Chemistry of Materials</i> , <b>2007</b> , 19, 4827-483 | 3 <b>2</b> .6 | 107 |
| 194 | Cyclometalated iridium(III)-sensitized titanium dioxide solar cells. <i>Photochemical and Photobiological Sciences</i> , <b>2006</b> , 5, 871-3   | 4.2           | 107 |
| 193 | N,N-Diarylanilinosquaraines and Their Application to Organic Photovoltaics. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 4789-4798   | 9.6           | 106 |
| 192 | Thermally Stable Hole-Transporting Materials Based upon a Fluorene Core. <i>Advanced Functional Materials</i> , <b>2002</b> , 12, 245   | 15.6          | 104 |
| 191 | Crystal Structure of a Porous Zirconium Phosphate/Phosphonate Compound and Photocatalytic Hydrogen Production from Related Materials. <i>Chemistry of Materials</i> , <b>1996</b> , 8, 2239-2246                  | 9.6           | 104 |
| 190 | "Quick-Silver" from a Systematic Study of Highly Luminescent, Two-Coordinate, d Coinage Metal Complexes. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 8616-8626                           | 16.4          | 102 |

# (2009-2012)

| 189 | Structural and Photophysical Studies of Phosphorescent Three-Coordinate Copper(I) Complexes Supported by an N-Heterocyclic Carbene Ligand. <i>Organometallics</i> , <b>2012</b> , 31, 7983-7993                    | 3.8  | 102 |
|-----|--|------|-----|
| 188 | Effect of carbazoleBxadiazole excited-state complexes on the efficiency of dye-doped light-emitting diodes. <i>Journal of Applied Physics</i> , <b>2002</b> , 91, 6717   | 2.5  | 102 |
| 187 | Control of emission colour with N-heterocyclic carbene (NHC) ligands in phosphorescent three-coordinate Cu(I) complexes. <i>Chemical Communications</i> , <b>2014</b> , 50, 7176-9                                 | 5.8  | 101 |
| 186 | Functionalized squaraine donors for nanocrystalline organic photovoltaics. <i>ACS Nano</i> , <b>2012</b> , 6, 972-8  | 16.7 | 101 |
| 185 | Separated carbon nanotube macroelectronics for active matrix organic light-emitting diode displays. <i>Nano Letters</i> , <b>2011</b> , 11, 4852-8   | 11.5 | 100 |
| 184 | A calibration method for nanowire biosensors to suppress device-to-device variation. <i>ACS Nano</i> , <b>2009</b> , 3, 3969-76  | 16.7 | 99  |
| 183 | Data Storage Studies on Nanowire Transistors with Self-Assembled Porphyrin Molecules. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 9646-9649  | 3.4  | 97  |
| 182 | Vibronic Structure in Room Temperature Photoluminescence of the Halide Perovskite CsBiBr. <i>Inorganic Chemistry</i> , <b>2017</b> , 56, 42-45   | 5.1  | 95  |
| 181 | Direct observation of structural changes in organic light emitting devices during degradation. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 3242-3247   | 2.5  | 95  |
| 180 | Simple and High Efficiency Phosphorescence Organic Light-Emitting Diodes with Codeposited Copper(I) Emitter. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 2368-2373   | 9.6  | 94  |
| 179 | Small-molecule photovoltaics based on functionalized squaraine donor blends. <i>Advanced Materials</i> , <b>2012</b> , 24, 1956-60   | 24   | 94  |
| 178 | High efficiency organic photovoltaic cells based on a vapor deposited squaraine donor. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 233304   | 3.4  | 94  |
| 177 | The Evolution of Organometallic Complexes in Organic Light-Emitting Devices. <i>MRS Bulletin</i> , <b>2007</b> , 32, 694-701   | 3.2  | 93  |
| 176 | Linker-Dependent Singlet Fission in Tetracene Dimers. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 10179-10190   | 16.4 | 90  |
| 175 | Fabrication of Nanostructures by Hydroxylamine Seeding of Gold Nanoparticle Templates. <i>Langmuir</i> , <b>2001</b> , 17, 1713-1718   | 4    | 90  |
| 174 | Re-evaluating the role of sterics and electronic coupling in determining the open-circuit voltage of organic solar cells. <i>Advanced Materials</i> , <b>2013</b> , 25, 6076-82                                    | 24   | 85  |
| 173 | Triplet state properties of the OLED emitter Ir(btp)2(acac): characterization by site-selective spectroscopy and application of high magnetic fields. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 5076-83       | 5.1  | 84  |
| 172 | High-performance single-crystalline arsenic-doped indium oxide nanowires for transparent thin-film transistors and active matrix organic light-emitting diode displays. <i>ACS Nano</i> , <b>2009</b> , 3, 3383-90 | 16.7 | 82  |

| 171 | Highly efficient electrophosphorescent polymer light-emitting devices. Organic Electronics, 2000, 1, 15  | <b>-29</b> 5  | 82 |
|-----|--|---------------|----|
| 170 | Arylamine-based squaraine donors for use in organic solar cells. <i>Nano Letters</i> , <b>2011</b> , 11, 4261-4  | 11.5          | 80 |
| 169 | Electroluminescent properties of self-assembled polymer thin films. Advanced Materials, 1995, 7, 395-3   | 39 <u>8</u> 4 | 80 |
| 168 | A paradigm for blue- or red-shifted absorption of small molecules depending on the site of Extension. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 16247-55  | 16.4          | 76 |
| 167 | Fused pyrene-diporphyrins: shifting near-infrared absorption to 1.5 microm and beyond. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 5523-6   | 16.4          | 76 |
| 166 | Direct Production of Hydrogen Peroxide with Palladium Supported on Phosphate Viologen Phosphonate Catalysts. <i>Journal of Catalysis</i> , <b>2000</b> , 196, 366-374  | 7.3           | 76 |
| 165 | Electrophosphorescence in organic light emitting diodes. <i>Current Opinion in Solid State and Materials Science</i> , <b>1999</b> , 4, 369-372  | 12            | 76 |
| 164 | Cascade Organic Solar Cells. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 4132-4140   | 9.6           | 75 |
| 163 | Near-infrared phosphorescent polymeric nanomicelles: efficient optical probes for tumor imaging and detection. <i>ACS Applied Materials &amp; Description of the State </i> | 9.5           | 75 |
| 162 | Photocurrent generation in multilayer organic-inorganic thin films with cascade energy architectures. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 4796-803  | 16.4          | 75 |
| 161 | High-efficiency BODIPY-based organic photovoltaics. <i>ACS Applied Materials &amp; Distriction</i> , 100 (1997), | 9.5           | 74 |
| 160 | Photophysics of Pt-porphyrin electrophosphorescent devices emitting in the near infrared. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 213503  | 3.4           | 74 |
| 159 | Imaging and Manipulation of Gold Nanorods with an Atomic Force Microscope. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 231-234   | 3.4           | 74 |
| 158 | Symmetry-Breaking Charge Transfer of Visible Light Absorbing Systems: Zinc Dipyrrins. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 21834-21845  | 3.8           | 72 |
| 157 | Statistical Copolymers with Side-Chain Hole and Electron Transport Groups for Single-Layer Electroluminescent Device Applications. <i>Chemistry of Materials</i> , <b>2000</b> , 12, 2542-2549   | 9.6           | 72 |
| 156 | Organic photovoltaics incorporating electron conducting exciton blocking layers. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 243307   | 3.4           | 68 |
| 155 | Importance of controlling nanotube density for highly sensitive and reliable biosensors functional in physiological conditions. <i>ACS Nano</i> , <b>2010</b> , 4, 6914-22   | 16.7          | 67 |
| 154 | Bipolar Copolymers as Host for Electroluminescent Devices: Effects of Molecular Structure on Film Morphology and Device Performance. <i>Macromolecules</i> , <b>2007</b> , 40, 8156-8161   | 5.5           | 67 |

# (2016-2005)

| 153 | A film bulk acoustic resonator in liquid environments. <i>Journal of Micromechanics and Microengineering</i> , <b>2005</b> , 15, 1911-1916   | 2    | 67 |
|-----|--|------|----|
| 152 | Porphyrins fused with unactivated polycyclic aromatic hydrocarbons. <i>Journal of Organic Chemistry</i> , <b>2012</b> , 77, 143-59   | 4.2  | 63 |
| 151 | Rapid, label-free, electrical whole blood bioassay based on nanobiosensor systems. <i>ACS Nano</i> , <b>2011</b> , 5, 9883-91  | 16.7 | 63 |
| 150 | Prospects and applications for organic light-emitting devices. <i>Current Opinion in Solid State and Materials Science</i> , <b>1997</b> , 2, 236-243  | 12   | 62 |
| 149 | Study of Energy Transfer and Triplet Exciton Diffusion in Hole-Transporting Host Materials. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 3157-3164   | 15.6 | 60 |
| 148 | Symmetry-breaking charge transfer in a zinc chlorodipyrrin acceptor for high open circuit voltage organic photovoltaics. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 5397-405 | 16.4 | 59 |
| 147 | Fused porphyrin-single-walled carbon nanotube hybrids: efficient formation and photophysical characterization. <i>ACS Nano</i> , <b>2013</b> , 7, 3466-75  | 16.7 | 59 |
| 146 | Growth and Characterization of Photoactive and Electroactive Zirconium Bisphosphonate Multilayer Films. <i>Chemistry of Materials</i> , <b>1996</b> , 8, 1490-1499                                     | 9.6  | 58 |
| 145 | Control of interface order by inverse quasi-epitaxial growth of squaraine/fullerene thin film photovoltaics. <i>ACS Nano</i> , <b>2013</b> , 7, 9268-75  | 16.7 | 56 |
| 144 | Synthesis and photochemical properties of porous zirconium viologen phosphonate compounds. <i>Chemistry of Materials</i> , <b>1994</b> , 6, 77-81  | 9.6  | 56 |
| 143 | Phosphorescent 2-, 3- and 4-coordinate cyclic (alkyl)(amino)carbene (CAAC) Cu(i) complexes. <i>Chemical Communications</i> , <b>2017</b> , 53, 9008-9011   | 5.8  | 55 |
| 142 | Cyclometallated iridium and platinum complexes with noninnocent ligands. <i>Inorganic Chemistry</i> , <b>2007</b> , 46, 3865-75  | 5.1  | 55 |
| 141 | Synthesis of Germanium Nanoclusters with Irreversibly Attached Functional Groups: Acetals, Alcohols, Esters, and Polymers. <i>Chemistry of Materials</i> , <b>2003</b> , 15, 1682-1689                 | 9.6  | 54 |
| 140 | Highly scalable, uniform, and sensitive biosensors based on top-down indium oxide nanoribbons and electronic enzyme-linked immunosorbent assay. <i>Nano Letters</i> , <b>2015</b> , 15, 1943-51        | 11.5 | 51 |
| 139 | Forming oriented organic crystals from amorphous thin films on patterned substrates via solvent-vapor annealing. <i>Organic Electronics</i> , <b>2005</b> , 6, 211-220                                 | 3.5  | 51 |
| 138 | The enhancement of intercalation reactions by ultrasound. <i>Journal of the Chemical Society Chemical Communications</i> , <b>1987</b> , 900   |      | 51 |
| 137 | Anionic iridium complexes for solid state light-emitting electrochemical cells. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 9556   |      | 50 |
| 136 | Highly Sensitive and Quick Detection of Acute Myocardial Infarction Biomarkers Using InO Nanoribbon Biosensors Fabricated Using Shadow Masks. <i>ACS Nano</i> , <b>2016</b> , 10, 10117-10125          | 16.7 | 48 |

| 135 | Organic Photovoltaics Using Tetraphenylbenzoporphyrin Complexes as Donor Layers. <i>Advanced Materials</i> , <b>2009</b> , 21, 1517-1520   | 24                  | 48 |
|-----|--|---------------------|----|
| 134 | Synthesis of Octasubstituted Cyclooctatetraenes and Their Use as Electron Transporters in Organic Light Emitting Diodes. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 7480-7486  | 16.4                | 48 |
| 133 | Photocurrent generation in metal bisphosphonate multilayer thin films. <i>Nature</i> , <b>1996</b> , 380, 610-612  | 50.4                | 48 |
| 132 | Use of additives in porphyrin-tape/C60 near-infrared photodetectors. <i>Organic Electronics</i> , <b>2011</b> , 12, 869  | 9-8.753             | 47 |
| 131 | Ruthenium Catalyzed Synthesis of Cross-Conjugated Polymers and Related Hyperbranched Materials. Copoly(arylene/1,1-vinylene)s. <i>Macromolecules</i> , <b>1998</b> , 31, 2784-2788   | 5.5                 | 47 |
| 130 | Elucidating the interplay between dark current coupling and open circuit voltage in organic photovoltaics. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 223305   | 3.4                 | 46 |
| 129 | Phosphorescent Platinum Dyads with Cyclometalated Ligands: Synthesis, Characterization, and Photophysical Studies <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 8022-8031  | 3.8                 | 46 |
| 128 | Dependence of Phosphorescent Emitter Orientation on Deposition Technique in Doped Organic Films. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 712-715   | 9.6                 | 45 |
| 127 | Singlet <b>E</b> riplet quenching in high intensity fluorescent organic light emitting diodes. <i>Chemical Physics Letters</i> , <b>2010</b> , 495, 161-165  | 2.5                 | 44 |
| 126 | Structure of a Novel Layered Zirconium Diphosphonate Compound: Zr2(O3PCH2CH2-viologen-CH2CH2PO3)F6.cntdot.2H2O. <i>Chemistry of Materials</i> , <b>1994</b> , 6, 1845-1849   | 9.6                 | 43 |
| 125 | Aqueous colloidal acene nanoparticles: a new platform for studying singlet fission. <i>Journal of Physical Chemistry B</i> , <b>2013</b> , 117, 15519-26   | 3.4                 | 42 |
| 124 | A fullerene-based organic exciton blocking layer with high electron conductivity. <i>Nano Letters</i> , <b>2013</b> , 13, 3315-20  | 11.5                | 41 |
| 123 | Charge transport and exciton dissociation in organic solar cells consisting of dipolar donors mixed with C70. <i>Physical Review B</i> , <b>2015</b> , 92,   | 3.3                 | 40 |
| 122 | Orange and red organic light-emitting devices using aluminum tris(5-hydroxyquinoxaline). <i>Synthetic Metals</i> , <b>1997</b> , 91, 217-221   | 3.6                 | 39 |
| 121 | Systematic Study of the Photoluminescent and Electroluminescent Properties of Pentacoordinate Carboxylate and Chloro Bis(8-hydroxyquinaldine) Complexes of Gallium(III). <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 17766-17771 |                     | 38 |
| 120 | The Roles of Structural Order and Intermolecular Interactions in Determining Ionization Energies and Charge-Transfer State Energies in Organic Semiconductors. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 160                             | 0 <del>7</del> 2781 | 37 |
| 119 | Observation of Triplet Exciton Formation in a Platinum-Sensitized Organic Photovoltaic Device.<br>Journal of Physical Chemistry Letters, <b>2011</b> , 2, 48-54  | 6.4                 | 37 |
| 118 | Molecular Engineering of Heterogeneous Catalysts: An Efficient Catalyst for the Production of Hydrogen Peroxide. <i>Journal of Catalysis</i> , <b>1996</b> , 161, 62-67  | 7.3                 | 37 |

| 117 | Synthesis and characterization of phosphorescent two-coordinate copper(i) complexes bearing diamidocarbene ligands. <i>Dalton Transactions</i> , <b>2017</b> , 46, 745-752  | 4.3               | 36 |  |
|-----|---|-------------------|----|--|
| 116 | Improving Photocatalysis for the Reduction of CO through Non-covalent Supramolecular Assembly.  Journal of the American Chemical Society, 2019, 141, 14961-14965  | 16.4              | 36 |  |
| 115 | Second-order non-linear optical properties of diironalkenylidyne complexes; crystal structure of {(IJC5H5)2Fe2(CO)2(ICO)(IJE)?C?CH?CH?C6H4?(p)-NMe2)}+BF4IJPolyhedron, <b>1992</b> , 11, 1429-1435                  | 2.7               | 36 |  |
| 114 | Enhancement of the Luminescent Efficiency in Carbene-Au-Aryl Complexes by the Restriction of Renner-Teller Distortion and Bond Rotation. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 6158- | 6 <sup>16</sup> 2 | 35 |  |
| 113 | Impact of Molecular Orientation and Spontaneous Interfacial Mixing on the Performance of Organic Solar Cells. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 5597-5604   | 9.6               | 34 |  |
| 112 | A reversible thermoresponsive sealant for temporary closure of ocular trauma. <i>Science Translational Medicine</i> , <b>2017</b> , 9,  | 17.5              | 34 |  |
| 111 | Second-order non-linear optical properties of Fe(SALEN) complexes. <i>Polyhedron</i> , <b>1996</b> , 15, 2369-2376  | 2.7               | 34 |  |
| 110 | Thermally assisted delayed fluorescence (TADF): fluorescence delayed is fluorescence denied. <i>Materials Horizons</i> , <b>2020</b> , 7, 1210-1217   | 14.4              | 33 |  |
| 109 | Properties of Fluorenyl Silanes in Organic Light Emitting Diodes. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 1724  | -19.81            | 33 |  |
| 108 | Organometallic complexes as hole-transporting materials in organic light-emitting diodes. <i>Inorganic Chemistry</i> , <b>2004</b> , 43, 1697-707   | 5.1               | 32 |  |
| 107 | Synthesis and Study of Zirconium Viologen Phosphonate Thin Films Containing Colloidal Platinum.<br>Journal of the American Chemical Society, <b>1994</b> , 116, 765-766   | 16.4              | 32 |  |
| 106 | Substituted 1,3-bis(imino)isoindole diols: a new class of proton transfer dyes. <i>Organic Letters</i> , <b>2011</b> , 13, 1598-601   | 6.2               | 30 |  |
| 105 | Spin-orbit coupling routes and OLED performance: studies of blue-light emitting Ir(III) and Pt(II) complexes <b>2007</b> ,  |                   | 30 |  |
| 104 | Symmetry-Breaking Charge Transfer in Boron Dipyridylmethene (DIPYR) Dimers. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 1083-1095  | 6.1               | 29 |  |
| 103 | Triplet state relaxation processes of the OLED emitter Pt(4,6-dFppy)(acac). <i>Chemical Physics Letters</i> , <b>2009</b> , 468, 46-51  | 2.5               | 29 |  |
| 102 | Matrix influence on the OLED emitter Ir(btp)2(acac) in polymeric host materials latudies by persistent spectral hole burning. <i>Organic Electronics</i> , <b>2008</b> , 9, 641-648                                 | 3.5               | 29 |  |
| 101 | Fluorophores Related to the Green Fluorescent Protein and Their Use in Optoelectronic Devices. <i>Advanced Materials</i> , <b>2000</b> , 12, 1678-1681  | 24                | 29 |  |
| 100 | Phosphorescence dynamics and spin-lattice relaxation of the OLED emitter Ir(btp)2(acac). <i>Chemical Physics Letters</i> , <b>2007</b> , 444, 273-279   | 2.5               | 28 |  |

| 99 | Anionic order and band gap engineering in vacancy ordered triple perovskites. <i>Chemical Communications</i> , <b>2019</b> , 55, 3164-3167   | 5.8  | 28 |
|----|--|------|----|
| 98 | Understanding molecular fragmentation in blue phosphorescent organic light-emitting devices. <i>Organic Electronics</i> , <b>2019</b> , 64, 15-21  | 3.5  | 27 |
| 97 | Manipulating Triplet Yield through Control of Symmetry-Breaking Charge Transfer. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 3264-3270   | 6.4  | 26 |
| 96 | Solvent vapor annealing on perylene-based organic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 15700-15709  | 13   | 25 |
| 95 | In Situ Observation of Degradation by Ligand Substitution in Small-Molecule Phosphorescent Organic Light-Emitting Diodes. <i>Chemistry of Materials</i> , <b>2014</b> , 26, 6578-6584                    | 9.6  | 25 |
| 94 | Current challenges in organic photovoltaic solar energy conversion. <i>Topics in Current Chemistry</i> , <b>2012</b> , 312, 175-212  |      | 25 |
| 93 | Electrophosphorescence from substituted poly(thiophene) doped with iridium or platinum complex. <i>Thin Solid Films</i> , <b>2004</b> , 468, 226-233   | 2.2  | 24 |
| 92 | Phenanthro[9,10-d]triazole and imidazole derivatives: high triplet energy host materials for blue phosphorescent organic light emitting devices. <i>Materials Horizons</i> , <b>2019</b> , 6, 1179-1186  | 14.4 | 24 |
| 91 | Symmetry breaking charge transfer as a means to study electron transfer with no driving force. <i>Faraday Discussions</i> , <b>2019</b> , 216, 379-394   | 3.6  | 23 |
| 90 | Chemical surface modification of parylene C for enhanced protein immobilization and cell proliferation. <i>Acta Biomaterialia</i> , <b>2011</b> , 7, 3746-56   | 10.8 | 23 |
| 89 | Combined magnetic resonance and optical imaging of head and neck tumor xenografts using Gadolinium-labelled phosphorescent polymeric nanomicelles. <i>Head &amp; Neck Oncology</i> , <b>2010</b> , 2, 35 |      | 23 |
| 88 | Actuation of polypyrrole nanowires. <i>Nanotechnology</i> , <b>2008</b> , 19, 165501   | 3.4  | 23 |
| 87 | Systematic Control of the Orientation of Organic Phosphorescent Pt Complexes in Thin Films for Increased Optical Outcoupling. <i>Advanced Materials</i> , <b>2019</b> , 31, e1900921                     | 24   | 22 |
| 86 | Chemical Annealing of Zinc Tetraphenylporphyrin Films: Effects on Film Morphology and Organic Photovoltaic Performance. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 2583-2591                      | 9.6  | 21 |
| 85 | Acetylide-bridged tetracene dimers. Chemical Communications, 2011, 47, 3754-6  | 5.8  | 21 |
| 84 | Exciplex quenching of a luminescent cyclometallated platinum complex by extremely poor Lewis bases. <i>Chemical Communications</i> , <b>2009</b> , 4215-7  | 5.8  | 21 |
| 83 | Virtual screening of electron acceptor materials for organic photovoltaic applications. <i>New Journal of Physics</i> , <b>2013</b> , 15, 105029   | 2.9  | 20 |
| 82 | Boron Dipyridylmethene (DIPYR) Dyes: Shedding Light on Pyridine-Based Chromophores. <i>Journal of Organic Chemistry</i> , <b>2017</b> , 82, 7215-7222  | 4.2  | 19 |

#### (1988-2005)

| 81             | Fabrication of polystyrene latex nanostructures by nanomanipulation and thermal processing. <i>Nano Letters</i> , <b>2005</b> , 5, 2624-9  | 11.5 | 19 |  |
|----------------|--|------|----|--|
| 80             | Reversible Bioadhesives Using Tannic Acid Primed Thermally-Responsive Polymers. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1907478   | 15.6 | 19 |  |
| 79             | Molecular Orientation of Poly-3-hexylthiophene at the Buried Interface with Fullerene. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 1757-1762                                      | 6.4  | 18 |  |
| 78             | Multicomponent Electrodes for Water Oxidation: From Combinatorial to Individual Electrode Study. <i>Chemistry of Materials</i> , <b>2002</b> , 14, 3343-3348   | 9.6  | 18 |  |
| 77             | Photophysical and electrochemical properties of 1,3-bis(2-pyridylimino)isoindolate platinum(II) derivatives. <i>Dalton Transactions</i> , <b>2012</b> , 41, 8648-59                                    | 4.3  | 16 |  |
| 76             | Excited-state distortions of cyclometalated Ir(III) complexes determined from the vibronic structure in luminescence spectra. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 3256-62      | 2.8  | 16 |  |
| <i>75</i>      | Gram Scale Synthesis of Benzophenanthroline and Its Blue Phosphorescent Platinum Complex. <i>Organic Letters</i> , <b>2016</b> , 18, 3960-3  | 6.2  | 16 |  |
| 74             | Efficient energy sensitization of C60 and application to organic photovoltaics. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 11920-8   | 16.4 | 15 |  |
| 73             | Blue Emissive fac/mer-Iridium (III) NHC Carbene Complexes and their Application in OLEDs. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2001994   | 8.1  | 15 |  |
| 7 <sup>2</sup> | Tuning State Energies for Narrow Blue Emission in Tetradentate Pyridyl-Carbazole Platinum Complexes. <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 12348-12357  | 5.1  | 14 |  |
| 71             | Implications of Multichromophoric Arrays in Organic Photovoltaics. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 5386-5392   | 9.6  | 14 |  |
| 70             | Highly Efficient Deep Blue Luminescence of 2-Coordinate Coinage Metal Complexes Bearing Bulky NHC Benzimidazolyl Carbene. <i>Frontiers in Chemistry</i> , <b>2020</b> , 8, 401                         | 5    | 14 |  |
| 69             | A quinoidal bis-phenalenyl-fused porphyrin with supramolecular organization and broad near-infrared absorption. <i>Chemical Communications</i> , <b>2016</b> , 52, 1949-52                             | 5.8  | 14 |  |
| 68             | Platinum and palladium incorporation into phosphate/viologen-phosphonates of zirconium and hafnium: synthesis and characterization. <i>Journal of Molecular Structure</i> , <b>1998</b> , 470, 191-205 | 3.4  | 14 |  |
| 67             | Structure and bonding in Group 4 metallocene acetylide and metallacyclopentadiene complexes. <i>Organometallics</i> , <b>1992</b> , 11, 3691-3696  | 3.8  | 14 |  |
| 66             | Organic Solar Cells with Open Circuit Voltage over 1.25 V Employing<br>Tetraphenyldibenzoperiflanthene as the Acceptor. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 19027-19           | 9034 | 14 |  |
| 65             | Phase transition in amphiphilic poly(N-isopropylacrylamide): controlled gelation. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 13623-13631   | 3.6  | 13 |  |
| 64             | Intercalation of redox-active organometallic cubane clusters into layered metal oxides and related solids. <i>Journal of the Chemical Society Chemical Communications</i> , <b>1988</b> , 223          |      | 13 |  |

| 63 | Surface chemical immobilization of parylene C with thermosensitive block copolymer brushes based on N-isopropylacrylamide and N-tert-butylacrylamide: synthesis, characterization, and cell adhesion/detachment. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2012</b> , | 3.5 | 12 |
|----|--|-----|----|
| 62 | 100, 217-29 Amorphous vs crystalline exciton blocking layers at the anode interface in planar and planar-mixed heterojunction organic solar cells. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 213304  | 3.4 | 11 |
| 61 | Higher efficiency conjugated polymer-based LEDs by control of polymer film morphology and interchain interactions. <i>Synthetic Metals</i> , <b>2001</b> , 119, 523-524  | 3.6 | 11 |
| 60 | Synthesis and characterization of phosphorescent platinum and iridium complexes with cyclometalated corannulene. <i>Dalton Transactions</i> , <b>2015</b> , 44, 8456-66  | 4.3 | 10 |
| 59 | Hydrothermal Synthesis, Crystal Structure, and Magnetic Properties of Cs[(V2O3)(HPO4)2(H2O)], a Mixed-Valence Vanadium (IV, V) Hydrogen Phosphate with a One-Dimensional (-VIV-O-VV-O-) Chain of Corner-Sharing VO6 Octahedra. <i>Journal of Solid State Chemistry</i> , <b>1994</b> , 109, 259-264            | 3.3 | 10 |
| 58 | A solid-state deuterium NMR investigation of the structure of the ferrocenylethylaminelzirconium hydrogen phosphate intercalation compound. <i>Journal of the Chemical Society Chemical Communications</i> , <b>1992</b> , 201-203   |     | 10 |
| 57 | Synthesis and characterization of phosphorescent three-coordinate copper(I) complexes bearing bis(amino)cyclopropenylidene carbene (BAC). <i>Inorganica Chimica Acta</i> , <b>2018</b> , 482, 246-251  | 2.7 | 9  |
| 56 | Synthesis and Study of Asymmetrically Layered Zirconium Phosphonates. <i>ACS Symposium Series</i> , <b>1992</b> , 166-177  | 0.4 | 9  |
| 55 | Synthesis and characterization of phosphorescent cyclometalated Ir and Pt heteroleptic complexes using cyclophane-based chelates. <i>Polyhedron</i> , <b>2016</b> , 116, 182-188   | 2.7 | 9  |
| 54 | Rapid Multiscale Computational Screening for OLED Host Materials. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2019</b> , 11, 5276-5288   | 9.5 | 9  |
| 53 | From Molecules to Materials: Current Trends and Future Directions <b>1998</b> , 10, 1297   |     | 9  |
| 52 | Synthesis and characterization of phosphorescent isomeric iridium complexes with a rigid cyclometalating ligand. <i>Polyhedron</i> , <b>2018</b> , 140, 138-145  | 2.7 | 8  |
| 51 | Reciprocal carrier collection in organic photovoltaics. <i>Physical Review B</i> , <b>2011</b> , 84,   | 3.3 | 8  |
| 50 | Whole-cell sensing for a harmful bloom-forming microscopic alga by measuring antibodyantigen forces. <i>IEEE Transactions on Nanobioscience</i> , <b>2006</b> , 5, 149-56  | 3.4 | 8  |
| 49 | Mercuric ion sensing by a film bulk acoustic resonator. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2007</b> , 54, 1723-5  | 3.2 | 7  |
| 48 | Chromophore-labeled dendrimers for use in single-layer light-emitting diodes. <i>Macromolecular Symposia</i> , <b>2000</b> , 154, 163-170  | 0.8 | 7  |
| 47 | A Luminescent Two-Coordinate Au Bimetallic Complex with a Tandem-Carbene Structure: A Molecular Design for the Enhancement of TADF Radiative Decay Rate. <i>Chemistry - A European Journal</i> , <b>2021</b> , 27, 6191-6197   | 4.8 | 7  |
| 46 | Performance of enhanced DuBois type water reduction catalysts (WRC) in artificial photosynthesis effects of various proton relays during catalysis. <i>Faraday Discussions</i> , <b>2019</b> , 215, 141-161  | 3.6 | 6  |

# (2020-2017)

| 45 | High-Performance Sub-Micrometer Channel WSe Field-Effect Transistors Prepared Using a Flood-Dike Printing Method. <i>ACS Nano</i> , <b>2017</b> , 11, 12536-12546  | 16.7                            | 6 |  |
|----|--|---------------------------------|---|--|
| 44 | Advances in the development and growth of functional materials: Toward the paradigm of materials by design. <i>MRS Bulletin</i> , <b>2012</b> , 37, 682-690  | 3.2                             | 6 |  |
| 43 | Power losses in bilayer inverted small molecule organic solar cells. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 233903  | 3.4                             | 6 |  |
| 42 | Selective, electrochemically activated biofunctionalization of In2O3 nanowires using an air-stable surface modifier. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2011</b> , 3, 4765-9  | 9.5                             | 6 |  |
| 41 | Tuning the Photophysical and Electrochemical Properties of Aza-Boron-Dipyridylmethenes for Fluorescent Blue OLEDs. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101175  | 15.6                            | 6 |  |
| 40 | Toward rational design of TADF two-coordinate coinage metal complexes: understanding the relationship between natural transition orbital overlap and photophysical properties. <i>Journal of Materials Chemistry C</i> , <b>2022</b> , 10, 4674-4683 | 7.1                             | 6 |  |
| 39 | Vibrational Sum Frequency Generation Study of the Interference Effect on a Thin Film of 4,4'-Bis(-carbazolyl)-1,1'-biphenyl (CBP) and Its Interfacial Orientation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 26515-26524     | 9.5                             | 5 |  |
| 38 | Synthesis and photophysical characterization of a bis-pincer osmium complex. <i>Polyhedron</i> , <b>2014</b> , 84,   | 136 <u>-</u> 21 <del>/1</del> 3 | 5 |  |
| 37 | Effect of Sulfur Poisoning in High Pressure Catalytic Partial Oxidation of Methane over RhILe/Al2O3 Catalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2011</b> , 50, 4373-4380   | 3.9                             | 5 |  |
| 36 | Wavelength-dependent photofragmentation of a mixed-ligand cyclometalated platinum(II) coordination compound in a molecular beam. <i>Inorganic Chemistry</i> , <b>2008</b> , 47, 2389-95  | 5.1                             | 5 |  |
| 35 | Improvement of metal and tissue adhesion on surface-modified parylene C. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2009</b> , 89, 206-14   | 5.4                             | 5 |  |
| 34 | 22.1: Invited Paper: Color Tuning Dopants for Electrophosphorescent Devices: Toward Efficient Blue Phosphorescence from Metal Complexes. <i>Digest of Technical Papers SID International Symposium</i> , <b>2005</b> , 36, 1058                      | 0.5                             | 5 |  |
| 33 | Vacuum Deposition of Thin Films of Pentaphenylcyclopentadienyl Radical and Their Electronic Properties. <i>Chemistry of Materials</i> , <b>2002</b> , 14, 109-115  | 9.6                             | 5 |  |
| 32 | Growth and characterization of potassium-doped superfulleride thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1998</b> , 16, 2395-2399  | 2.9                             | 5 |  |
| 31 | Doped Organic Light-Emitting Diodes Based on Random Copolymers Containing Both Hole and Electron Transport Groups. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 558, 433   |                                 | 5 |  |
| 30 | Molecular Alignment of Homoleptic Iridium Phosphors in Organic Light-Emitting Diodes. <i>Advanced Materials</i> , <b>2021</b> , 33, e2102882   | 24                              | 5 |  |
| 29 | Tetra-Aza-Pentacenes by means of a One-Pot Friedlider Synthesis. <i>Chemistry - A European Journal</i> , <b>2019</b> , 25, 1472-1475   | 4.8                             | 5 |  |
| 28 | Molecular dynamics of four-coordinate carbene-Cu(I) complexes employing tris(pyrazolyl)borate ligands. <i>Polyhedron</i> , <b>2020</b> , 180, 114381   | 2.7                             | 4 |  |

| 27  | Multichromophoric energy sensitization of C60 for organic photovoltaics. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 113305   | 3.4              | 4 |
|-----|---|------------------|---|
| 26  | Color-tunable pixels and lasers using vacuum-deposited organic thin films 1997,   |                  | 4 |
| 25  | Synthesis and study of zirconium viologen-phosphonate compounds on a polymer surfactant template and their use in photocatalytic production of hydrogen. <i>Supramolecular Science</i> , <b>1997</b> , 4, 35-42                                     | 2                | 4 |
| 24  | 47.4: Blue Phosphorescent Organic Light Emitting Device Stability Analysis. <i>Digest of Technical Papers SID International Symposium</i> , <b>2008</b> , 39, 712   | 0.5              | 4 |
| 23  | Symmetric pyrrolic squaraines and their application to organic photovoltaics. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2019</b> , 374, 16-21   | 4.7              | 3 |
| 22  | Small-molecule organic light-emitting devices in flat panel display applications <b>1998</b> , 3279, 87   |                  | 3 |
| 21  | Electrical properties of K-doped superfulleride thin films. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 3696-370  | <b>0</b> 2.5     | 3 |
| 20  | Organic light-emitting devices for ultralightweight color flat panel displays 1997,   |                  | 2 |
| 19  | P-204: Distinguished Poster Paper: A Near Infrared OLED for Day/Night Display. <i>Digest of Technical Papers SID International Symposium</i> , <b>2008</b> , 39, 1975   | 0.5              | 2 |
| 18  | High-efficiency organic electrophosphorescent devices <b>2001</b> , 4105, 119   |                  | 2 |
| 17  | Efficient photoinduced charge separation in layered zirconium viologen phosphonate compounds. [Erratum to document cited in CA120(2):18913f]. <i>Journal of the American Chemical Society</i> , <b>1994</b> , 116, 3175-3175                        | 16.4             | 2 |
| 16  | Decoupling inter- and intra-dimer singlet fission 2017,   |                  | 2 |
| 15  | Metal deposition for optoelectronic devices using a low vacuum vapor phase deposition (VPD) system. <i>Organic Electronics</i> , <b>2014</b> , 15, 3052-3060  | 3.5              | 1 |
| 14  | Solar Cells: Re-evaluating the Role of Sterics and Electronic Coupling in Determining the Open-Circuit Voltage of Organic Solar Cells (Adv. Mater. 42/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 5990-5                                   | 3 <del>9</del> 0 | 1 |
| 13  | Top-down Fabricated Polysilicon Nanoribbon Biosensor Chips for Cancer Diagnosis. <i>Materials Research Society Symposia Proceedings</i> , <b>2013</b> , 1569, 213-218   |                  | 1 |
| 7.2 |   |                  |   |
| 12  | Cyclometallated Organoiridium Complexes as Emitters in Electrophosphorescent Devices131-161   |                  | 1 |
| 11  | Cyclometallated Organoiridium Complexes as Emitters in Electrophosphorescent Devices131-161  Investigation of the thermal stability of 2-D patterns of Au nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2007</b> , 7, 2863-9 | 1.3              | 1 |

#### LIST OF PUBLICATIONS

| 9 | Symmetric <b>D</b> ouble Spirol Wide Energy Gap Hosts for Blue Phosphorescent OLED Devices. <i>Advanced Optical Materials</i> , <b>2022</b> , 10, 2101530                               | 8.1 | 1 |
|---|---|-----|---|
| 8 | Influence of Dimethyl Sulfoxide on the Structural Topology during Crystallization of Pbl. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 16799-16803                                    | 5.1 | 1 |
| 7 | ORGANIC LIGHT EMITTING DEVICES. Materials and Energy, <b>2016</b> , 195-241   |     | 1 |
| 6 | Synthesis and Characterization of Zinc(II) Complexes Bearing 4-Acridinol and 1-Phenazinol Ligands. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 866-871                               | 5.1 | 1 |
| 5 | Hole Transporting Materials with High Glass Transition Temperatures for Use in Organic Light-Emitting Devices <b>1998</b> , 10, 1108  |     | 1 |
| 4 | From Molecules to Materials: Current Trends and Future Directions <b>1998</b> , 10, 1297  |     | 1 |
| 3 | Phosphorescent monometallic and bimetallic two-coordinate Au(I) complexes with N-heterocyclic carbene and aryl ligands. <i>Inorganica Chimica Acta</i> , <b>2021</b> , 517, 120188      | 2.7 | О |
| 2 | In Vivo Experimental and Analytical Studies for Bevacizumab Diffusion Coefficient Measurement in the Rabbit Vitreous Humor. <i>Journal of Heat Transfer</i> , <b>2021</b> , 143, 032101 | 1.8 | О |

Nanosensing applications of In 2 O 3 nanowires and carbon nanotubes **2005**, 6008, 75