

References

- ❖ Abdel-Rahman, L. H., Abu-Dief, A. M., El-Khatib, R. M., Abdel-Fatah, S. M., & Seleem, A. A. (2016). New Cd (II), Mn (II) and Ag (I) schiff base complexes: Synthesis, characterization, DNA binding and antimicrobial activity. *Int. J. Nano. Chem*, 2(3), 83-91.
- ❖ Abe, S., Fujii, K., & Sono, T. (1994). Liquid-liquid extraction of manganese (II), copper (II) and zinc (II) with acyclic and macrocyclic Schiff bases containing bisphenol A subunits. *Analytica Chimica Acta*, 293(3), 325-330.
- ❖ Adhikary, C., & Koner, S. (2010). Structural and magnetic studies on copper (II) azido complexes. *Coordination Chemistry Reviews*, 254(23-24), 2933-2958.
- ❖ Adsule, S., Barve, V., Chen, D., Ahmed, F., Dou, Q. P., Padhye, S., & Sarkar, F. H. (2006). Novel Schiff base copper complexes of quinoline-2 carboxaldehyde as proteasome inhibitors in human prostate cancer cells. *Journal of medicinal chemistry*, 49(24), 7242-7246.
- ❖ Afkhami, A., Madrakian, T., Shirzadmehr, A., Tabatabaee, M., & Bagheri, H. (2012). New Schiff base-carbon nanotube–nanosilica–ionic liquid as a high performance sensing material of a potentiometric sensor for nanomolar determination of cerium (III) ions. *Sensors and Actuators B: Chemical*, 174, 237-244.
- ❖ Ahn, S. K., Kasi, R. M., Kim, S. C., Sharma, N., & Zhou, Y. (2008). Stimuli-responsive polymer gels. *Soft Matter*, 4(6), 1151-1157.
- ❖ Ajayaghosh, A., & Praveen, V. K. (2007). π -Organogels of self-assembled π -phenylenevinylenes: soft materials with distinct size, shape, and functions. *Accounts of Chemical Research*, 40(8), 644-656.
- ❖ Al Zoubi, W. (2013). Solvent extraction of metal ions by use of Schiff bases. *Journal of Coordination Chemistry*, 66(13), 2264-2289.
- ❖ Al Zoubi, W., & Ko, Y. G. (2016). Organometallic complexes of Schiff bases: Recent progress in oxidation catalysis. *Journal of Organometallic Chemistry*, 822, 173-188.
- ❖ Alexander, S., Udayakumar, V., & Gayathri, V. (2009). Hydrogenation of olefins by polymer-bound palladium (II) Schiff base catalyst. *Journal of Molecular Catalysis A: Chemical*, 314(1-2), 21-27.
- ❖ Ali, B., & Iqbal, M. A. (2017). Coordination complexes of manganese and their biomedical applications. *ChemistrySelect*, 2(4), 1586-1604.
- ❖ Amacher, A. M., Puigmartí-Luis, J., Geng, Y., Lebedev, V., Laukhin, V., Krämer, K., & Liu, S. X. (2015). Coordination-directed self-assembly of a simple benzothiadiazole-fused tetrathiafulvalene to low-bandgap metallogels. *Chemical communications*, 51(81), 15063-15066.
- ❖ Ambike, V., Adsule, S., Ahmed, F., Wang, Z., Afrasiabi, Z., Sinn, E., & Padhye, S. (2007). Copper conjugates of nimesulide Schiff bases targeting VEGF, COX and Bcl-2 in pancreatic cancer cells. *Journal of inorganic biochemistry*, 101(10), 1517-1524.
- ❖ Amendola, V., Fabbri, L., Mangano, C., Miller, H., Pallavicini, P., Perotti, A., & Taglietti, A. (2002). Signal Amplification by a Fluorescent Indicator of a pH-Driven Intramolecular Translocation of a Copper (II) Ion. *Angewandte Chemie International Edition*, 41(14), 2553-2556.
- ❖ Ando, E., Miyazaki, J., Morimoto, K., Nakahara, H., & Fukuda, K. (1985). J-aggregation of photochromic spiropyran in Langmuir-Blodgett films. *Thin Solid Films*, 133(1-4), 21-28.

- ❖ Anis, I., Aslam, M., Noreen, Z., Afza, N., Hussain, A., Safder, M., & Chaudhry, A. H. (2013). A review (part A)-general applications of Schiff base transition metal complexes. *Int. J. Cur. Pharm. Res*, 5, 21-4.
- ❖ Aswal, D. K., Lenfant, S., Guerin, D., Yakhmi, J. V., & Vuillaume, D. (2006). Self-assembled monolayers on silicon for molecular electronics. *Analytica chimica acta*, 568(1-2), 84-108.
- ❖ Athanasopoulou, A. (2015). Polynuclear Ni (II) Complexes with Schiff Bases as Bridging Ligands: A Molecular Approach to Nanoscience.
- ❖ Avaji, P. G., Kumar, C. V., Patil, S. A., Shivananda, K. N., & Nagaraju, C. (2009). Synthesis, spectral characterization, in-vitro microbiological evaluation and cytotoxic activities of novel macrocyclic bis hydrazone. *European Journal of medicinal chemistry*, 44(9), 3552-3559.
- ❖ B. Levrard, W. Fieber, J. M. Lehn and A. Herrmann, *Helvetica Chimica Acta*, 2007, 90, 2281.
- ❖ Bader, N. R. (2009). Schiff's bases complexation and solid phase extraction for improved trace element analysis (Doctoral dissertation, Ph. D. Thesis, University of Standort Duisburg).
- ❖ Bardelang, D., Camerel, F., Margeson, J. C., Leek, D. M., Schmutz, M., Zaman, M. B., & Ripmeester, J. A. (2008). Unusual sculpting of dipeptide particles by ultrasound induces gelation. *Journal of the American Chemical Society*, 130(11), 3313-3315.
- ❖ Basak, S., Nanda, J., & Banerjee, A. (2012). A new aromatic amino acid based organogel for oil spill recovery. *Journal of Materials Chemistry*, 22(23), 11658-11664.
- ❖ Basumatary, D., Lal, R. A., & Kumar, A. (2015). Synthesis, and characterization of low-and high-spin manganese (II) complexes of polyfunctional adipoyldihydrazone: Effect of coordination of N-donor ligands on stereo-redox chemistry. *Journal of Molecular Structure*, 1092, 122-129.
- ❖ Beaujuge, P. M., & Fréchet, J. M. (2011). Molecular design and ordering effects in π -functional materials for transistor and solar cell applications. *Journal of the American Chemical Society*, 133(50), 20009-20029.
- ❖ Belgamwar, V. S., Pandey, M. S., Chauk, D. S., & Surana, S. J. (2014). Pluronic lecithin organogel. *Asian Journal of Pharmaceutics (AJP): Free full text articles from Asian J Pharm*, 2(3).
- ❖ Bella, S. D. (2001). Second-order nonlinear optical properties of transition metal complexes. *Chemical Society Reviews*, 30(6), 355-366.
- ❖ Berkesi, O., Körtvélyesi, T., Hetényi, C., Németh, T., & Pálinkó, I. (2003). Hydrogen bonding interactions of benzylidene type Schiff bases studied by vibrational spectroscopic and computational methods. *Physical Chemistry Chemical Physics*, 5(10), 2009-2014.
- ❖ Bhattacharya, B., Layek, A., Alam, M. M., Maity, D. K., Chakrabarti, S., Ray, P. P., & Ghoshal, D. (2014). Cd (II) based metal-organic framework behaving as a Schottky barrier diode. *Chemical Communications*, 50(58), 7858-7861.
- ❖ Borré, E., Stumbé, J. F., Bellemin-Lapponnaz, S., & Mauro, M. (2016). Light-Powered Self-Healable Metallosupramolecular Soft Actuators. *Angewandte Chemie International Edition*, 55(4), 1313-1317.

- ❖ Britovsek, G. J., Bruce, M., Gibson, V. C., Kimberley, B. S., Maddox, P. J., Mastroianni, S., & White, A. J. (1999). Iron and cobalt ethylene polymerization catalysts bearing 2, 6-bis (imino) pyridyl ligands: synthesis, structures, and polymerization studies. *Journal of the American Chemical Society*, 121(38), 8728-8740.
- ❖ Brodowska, K., Sykuła, A., Garribba, E., Łodyga-Chruścińska, E., & Sójka, M. (2016). Naringenin Schiff base: antioxidant activity, acid–base profile, and interactions with DNA. *Transition Metal Chemistry*, 41(2), 179-189.
- ❖ Buxton, G. A., & Clarke, N. (2006). Predicting structure and property relations in polymeric photovoltaic devices. *Physical Review B*, 74(8), 085207.
- ❖ ÇAKMAK, R., DAĞ, B., & YAŞAR, F. (2013). New Schiff Base Ligand Derived From 4-aminoantipyrine: Synthesis and Spectroscopic Characterization. In *Chair of the Conference* (Vol. 104, No. 213, p. 106).
- ❖ Capozzi, B., Xia, J., Adak, O., Dell, E. J., Liu, Z. F., Taylor, J. C., & Venkataraman, L. (2015). Single-molecule diodes with high rectification ratios through environmental control. *Nature nanotechnology*, 10(6), 522.
- ❖ Carnes, M. E., Collins, M. S., & Johnson, D. W. (2014). Transmetalation of self-assembled, supramolecular complexes. *Chemical Society Reviews*, 43(6), 1825-1834.
- ❖ Chakraborty, J., Thakurta, S., Samanta, B., Ray, A., Pilet, G., Batten, S. R., & Mitra, S. (2007). Synthesis, characterisation and crystal structures of three trinuclear cadmium (II) complexes with multidentate Schiff base ligands. *Polyhedron*, 26(17), 5139-5149.
- ❖ Chandra, S., & Gupta, L. K. (2005). Spectroscopic and biological studies on newly synthesized nickel (II) complexes of semicarbazones and thiosemicarbazones. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 62(4-5), 1089-1094.
- ❖ Chang, E. L., Simmers, C., & Knight, D. A. (2010). Cobalt complexes as antiviral and antibacterial agents. *Pharmaceuticals*, 3(6), 1711-1728.
- ❖ Chang, S., Jones, L., Wang, C., Henling, L. M., & Grubbs, R. H. (1998). Synthesis and characterization of new ruthenium-based olefin metathesis catalysts coordinated with bidentate Schiff-base ligands. *Organometallics*, 17(16), 3460-3465.
- ❖ Chaudhuri, P., Verani, C. N., Bill, E., Bothe, E., Weyhermüller, T., & Wieghardt, K. (2001). Electronic structure of bis (o-iminobenzosemiquinonato) metal complexes (Cu, Ni, Pd). The art of establishing physical oxidation states in transition-metal complexes containing radical ligands. *Journal of the American Chemical Society*, 123(10), 2213-2223.
- ❖ Che, Y., Datar, A., Yang, X., Naddo, T., Zhao, J., & Zang, L. (2007). Enhancing one-dimensional charge transport through intermolecular π -electron delocalization: conductivity improvement for organic nanobelts. *Journal of the American Chemical Society*, 129(20), 6354-6355.
- ❖ Chen, D., Martell, A. E., & Sun, Y. (1989). New synthetic cobalt Schiff base complexes as oxygen carriers. *Inorganic Chemistry*, 28(13), 2647-2652.
- ❖ Chen, G., Li, W., Zhou, T., Peng, Q., Zhai, D., Li, H., & Tang, B. Z. (2015). Conjugation-Induced Rigidity in Twisting Molecules: Filling the Gap Between Aggregation-Caused Quenching and Aggregation-Induced Emission. *Advanced Materials*, 27(30), 4496-4501.

- ❖ Chen, J., Law, C. C., Lam, J. W., Dong, Y., Lo, S. M., Williams, I. D., & Tang, B. Z. (2003). Synthesis, light emission, nano aggregation, and restricted intramolecular rotation of 1, 1-substituted 2, 3, 4, 5-tetraphenylsiloles. *Chemistry of materials*, 15(7), 1535-1546.
- ❖ Chen, J., Xu, B., Ouyang, X., Tang, B. Z., & Cao, Y. (2004). Aggregation-induced emission of cis, cis-1, 2, 3, 4-tetraphenylbutadiene from restricted intramolecular rotation. *The Journal of Physical Chemistry A*, 108(37), 7522-7526.
- ❖ Chen, P., Li, Q., Grindy, S., & Holten-Andersen, N. (2015). White-light-emitting lanthanide metallogels with tunable luminescence and reversible stimuli-responsive properties. *Journal of the American Chemical Society*, 137(36), 11590-11593.
- ❖ Chohan, Z. H., Sumrra, S. H., Youssoufi, M. H., & Hadda, T. B. (2010). Metal based biologically active compounds: Design, synthesis, and antibacterial/antifungal/cytotoxic properties of triazole-derived Schiff bases and their oxovanadium (IV) complexes. *European Journal of Medicinal Chemistry*, 45(7), 2739-2747.
- ❖ Choi, S., Bouffard, J., & Kim, Y. (2014). Aggregation-induced emission enhancement of a meso-trifluoromethyl BODIPY via J-aggregation. *Chemical Science*, 5(2), 751-755.
- ❖ Chow, H. F., & Zhang, J. (2005). Structural Diversity of α -Amino Acid Based Layer-Block Dendrons and Their Layer-Block Sequence-Dependent Gelation Properties. *Chemistry—A European Journal*, 11(20), 5817-5831.
- ❖ Cimerman, Z., Galic, N., & Bosner, B. (1997). The Schiff bases of salicylaldehyde and aminopyridines as highly sensitive analytical reagents. *Analytica Chimica Acta*, 343(1-2), 145-153.
- ❖ Clark, A. H., Gidley, M. J., Richardson, R. K., & Ross-Murphy, S. B. (1989). Rheological studies of aqueous amylose gels: the effect of chain length and concentration on gel modulus. *Macromolecules*, 22(1), 346-351.
- ❖ Cobo, I., Li, M., Sumerlin, B. S., & Perrier, S. (2015). Smart hybrid materials by conjugation of responsive polymers to biomacromolecules. *Nature materials*, 14(2), 143-159.
- ❖ Coelho, C., & Casadevall, A. (2016). Cryptococcal therapies and drug targets: the old, the new and the promising. *Cellular microbiology*, 18(6), 792-799.
- ❖ Cozzi, P. G. (2004). Metal–Salen Schiff base complexes in catalysis: practical aspects. *Chemical Society Reviews*, 33(7), 410-421.
- ❖ Cravotto, G., & Cintas, P. (2009). Molecular self-assembly and patterning induced by sound waves. The case of gelation. *Chemical Society Reviews*, 38(9), 2684-2697.
- ❖ Dai, S., Tam, K. C., Jenkins, R. D., & Bassett, D. R. (2000). Light scattering of dilute hydrophobically modified alkali-soluble emulsion solutions: Effects of hydrophobicity and spacer length of macromonomer. *Macromolecules*, 33(19), 7021-7028.
- ❖ Dak, P., Ebrahimi, A., & Alam, M. A. (2014). Non-faradaic impedance characterization of an evaporating droplet for microfluidic and biosensing applications. *Lab on a Chip*, 14(14), 2469-2479.
- ❖ Darensbourg, D. J., Mackiewicz, R. M., Phelps, A. L., & Billodeaux, D. R. (2004). Copolymerization of CO₂ and epoxides catalyzed by metal salen complexes. *Accounts of chemical research*, 37(11), 836-844.

- ❖ Dastidar, P., Ganguly, S., & Sarkar, K. (2016). Metallogels from coordination complexes, organometallic, and coordination polymers. *Chemistry—An Asian Journal*, 11(18), 2484-2498.
- ❖ Dave, S., & Bansal, N. (2013). Analgesic and Anti-Inflammatory Activities of Schiff Base Metal Complexes—A Review. *International Journal of Basic and Applied Chemical Sciences*, 3(1), 31-40.
- ❖ Dawn, A., Shiraki, T., Ichikawa, H., Takada, A., Takahashi, Y., Tsuchiya, Y., & Shinkai, S. (2012). Stereochemistry-dependent, mechanoresponsive supramolecular host assemblies for fullerenes: a guest-induced enhancement of thixotropy. *Journal of the American Chemical Society*, 134(4), 2161-2171.
- ❖ Dede, B., Karipcin, F., & Cengiz, M. (2009). Novel homo-and hetero-nuclear copper (II) complexes of tetradentate Schiff bases: Synthesis, characterization, solvent-extraction and catalase-like activity studies. *Journal of Hazardous materials*, 163(2-3), 1148-1156.
- ❖ Deng, J., Xu, Y., Liu, L., Feng, C., Tang, J., Gao, Y., & Ma, Y. (2016). An ambipolar organic field-effect transistor based on an AIE-active single crystal with a high mobility level of $2.0 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$. *Chemical Communications*, 52(11), 2370-2373.
- ❖ Derinkuyu, S., Ertekin, K., Oter, O., Denizalti, S., & Cetinkaya, E. (2008). Emission based fiber optic pH sensing with Schiff bases bearing dimethylamino groups. *Dyes and Pigments*, 76(1), 133-141.
- ❖ Desbouis, D., Troitsky, I. P., Belousoff, M. J., Spiccia, L., & Graham, B. (2012). Copper (II), zinc (II) and nickel (II) complexes as nuclease mimetics. *Coordination Chemistry Reviews*, 256(11-12), 897-937.
- ❖ Dhibar, S., Dey, A., Majumdar, S., Ghosh, D., Mandal, A., Ray, P. P., & Dey, B. (2018). A supramolecular Cd (ii)-metallogel: an efficient semiconductive electronic device. *Dalton Transactions*, 47(48), 17412-17420.
- ❖ Díaz, D. D., Kühbeck, D., & Koopmans, R. J. (2011). Stimuli-responsive gels as reaction vessels and reusable catalysts. *Chemical Society Reviews*, 40(1), 427-448.
- ❖ Diring, S., Camerel, F., Donnio, B., Dintzer, T., Toffanin, S., Capelli, R., & Ziessel, R. (2009). Luminescent ethynyl- pyrene liquid crystals and gels for optoelectronic devices. *Journal of the American Chemical Society*, 131(50), 18177-18185.
- ❖ Döring, A., Birnbaum, W., & Kuckling, D. (2013). Responsive hydrogels—structurally and dimensionally optimized smart frameworks for applications in catalysis, micro-system technology and material science. *Chemical Society Reviews*, 42(17), 7391-7420.
- ❖ Dragoman, D., & Dragoman, M. (2004). Terahertz fields and applications. *Progress in quantum electronics*, 28(1), 1-66.
- ❖ Du, X., Qi, J., Zhang, Z., Ma, D., & Wang, Z. Y. (2012). Efficient non-doped near infrared organic light-emitting devices based on fluorophores with aggregation-induced emission enhancement. *Chemistry of Materials*, 24(11), 2178-2185.
- ❖ Dudhat, S. R., & Kulkarni, S. (2018). Application of Schiff Bases and their Metal Complexes as Insecticides and Plant Growth Regulators-A Review.
- ❖ Fantucci, P., & Valenti, V. (1976). Molecular orbital study of a cobalt reversible oxygen carrier. *Journal of the American Chemical Society*, 98(13), 3832-3838.

- ❖ Faridbod, F., Ganjali, M., Dinarvand, R., Norouzi, P., & Riahi, S. (2008). Schiff's bases and crown ethers as supramolecular sensing materials in the construction of potentiometric membrane sensors. *Sensors*, 8(3), 1645-1703.
- ❖ Fathi, S. A. M., & Yaftian, M. R. (2009). Enrichment of trace amounts of copper (II) ions in water samples using octadecyl silica disks modified by a Schiff base ionophore prior to flame atomic absorption spectrometric determination. *Journal of hazardous materials*, 164(1), 133-137.
- ❖ Fenzl, C., Hirsch, T., & Wolfbeis, O. S. (2014). Photonic crystals for chemical sensing and biosensing. *Angewandte Chemie International Edition*, 53(13), 3318-3335.
- ❖ Fonn, D., MacDonald, K. E., Richter, D., & Pritchard, N. (2002). The ocular response to extended wear of a high Dk silicone hydrogel contact lens. *Clinical and Experimental Optometry*, 85(3), 176-182.
- ❖ Foster, J. A., & Steed, J. W. (2010). Exploiting cavities in supramolecular gels. *Angewandte Chemie International Edition*, 49(38), 6718-6724.
- ❖ Foster, J. A., Piepenbrock, M. O. M., Lloyd, G. O., Clarke, N., Howard, J. A., & Steed, J. W. (2010). Anion-switchable supramolecular gels for controlling pharmaceutical crystal growth. *Nature chemistry*, 2(12), 1037.
- ❖ Franceschini, P. L., Morstein, M., Berke, H., & Schmalle, H. W. (2003). Volatile β -ketoiminato- and β -diketiminato-based zirconium complexes as potential MOCVD precursors. *Inorganic chemistry*, 42(22), 7273-7282.
- ❖ Ganjali, M. R., Ravanshad, J., Hosseini, M., Salavati-Niasari, M., Pourjavid, M. R., & Baezzat, M. R. (2004). Novel Dy (III) sensor based on a new bis-pyrrolidene Schiff's base. *Electroanalysis: An International Journal Devoted to Fundamental and Practical Aspects of Electroanalysis*, 16(21), 1771-1776.
- ❖ Garoufis, A., Hadjikakou, S. K., & Hadjiliadis, N. (2009). Palladium coordination compounds as anti-viral, anti-fungal, anti-microbial and anti-tumor agents. *Coordination Chemistry Reviews*, 253(9-10), 1384-1397.
- ❖ Gasnier, A., Royal, G., & Terech, P. (2009). Metallo-supramolecular gels based on a multitopic cyclam bis-terpyridine platform. *Langmuir*, 25(15), 8751-8762.
- ❖ Geiger, C., Stanescu, M., Chen, L., & Whitten, D. G. (1999). Organogels resulting from competing self-assembly units in the gelator: structure, dynamics, and photophysical behavior of gels formed from cholesterol- stilbene and cholesterol-squaraine gelators. *Langmuir*, 15(7), 2241-2245.
- ❖ Gholivand, M. B., Rahimi-Nasrabadi, M., Ganjali, M. R., & Salavati-Niasari, M. (2007). Highly selective and sensitive copper membrane electrode based on a new synthesized Schiff base. *Talanta*, 73(3), 553-560.
- ❖ Ghossoub, A., & Lehn, J. M. (2005). Dynamic sol-gel interconversion by reversible cation binding and release in G-quartet-based supramolecular polymers. *Chemical Communications*, (46), 5763-5765.
- ❖ Goedken, V. L., Kildahl, N. K., & Busch, D. H. (1977). Five-coordinate cobalt (II) complexes of macrocyclic ligands—a new reversible oxygen carrying system. *Journal of Coordination Chemistry*, 7(2), 89-103.
- ❖ Golla, U., Adhikary, A., Mondal, A. K., Tomar, R. S., & Konar, S. (2016). Synthesis, structure, magnetic and biological activity studies of bis-hydrazone derived Cu (ii) and Co (ii) coordination compounds. *Dalton Transactions*, 45(29), 11849-11863.

- ❖ Gong, X., Ge, Y. Y., Fang, M., Gu, Z. G., Zheng, S. R., Li, W. S., & Cai, Y. P. (2011). Construction of four 3d-4d/4d complexes based on salen-type schiff base ligands. *CrystEngComm*, 13(23), 6911-6915.
- ❖ Goswami, N., Yao, Q., Luo, Z., Li, J., Chen, T., & Xie, J. (2016). Luminescent metal nanoclusters with aggregation-induced emission. *The journal of physical chemistry letters*, 7(6), 962-975.
- ❖ Gothard, N. A., Mara, M. W., Huang, J., Szarko, J. M., Rolczynski, B., Lockard, J. V., & Chen, L. X. (2012). Strong steric hindrance effect on excited state structural dynamics of Cu (I) diimine complexes. *The Journal of Physical Chemistry A*, 116(9), 1984-1992.
- ❖ Grabowski, Z. R., Rotkiewicz, K., & Rettig, W. (2003). Structural changes accompanying intramolecular electron transfer: focus on twisted intramolecular charge-transfer states and structures. *Chemical reviews*, 103(10), 3899-4032.
- ❖ Gronwald, O., Snip, E., & Shinkai, S. (2002). Gelators for organic liquids based on self-assembly: a new facet of supramolecular and combinatorial chemistry. *Current opinion in colloid & interface science*, 7(1-2), 148-156.
- ❖ Gudasi, K. B., Patil, M. S., Vadavi, R. S., Shenoy, R. V., Patil, S. A., & Nethaji, M. (2006). X-ray crystal structure of the N-(2-hydroxy-1-naphthalidene) phenylglycine Schiff base. Synthesis and characterization of its transition metal complexes. *Transition Metal Chemistry*, 31(5), 580-585.
- ❖ Guerchais, V., Ordroneau, L., & Le Bozec, H. (2010). Recent developments in the field of metal complexes containing photochromic ligands: Modulation of linear and nonlinear optical properties. *Coordination Chemistry Reviews*, 254(21-22), 2533-2545.
- ❖ Guo, B., Cai, X., Xu, S., Fateminia, S. M. A., Liu, J., Liang, J., & Liu, B. (2016). Decoration of porphyrin with tetraphenylethene: converting a fluorophore with aggregation-caused quenching to aggregation-induced emission enhancement. *Journal of Materials Chemistry B*, 4(27), 4690-4695.
- ❖ Gupta, N., Singhal, D., Singh, A. K., Singh, N., & Singh, U. P. (2017). A highly selective chromogenic sensor for Mn²⁺, turn-off fluorometric for Hg²⁺ ion, and turn-on fluorogenic sensor for F⁻ ion with the practical application. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 176, 38-46.
- ❖ Gupta, P., Vermani, K., & Garg, S. (2002). Hydrogels: from controlled release to pH-responsive drug delivery. *Drug discovery today*, 7(10), 569-579.
- ❖ Gupta, R. K., & Singh, R. A. (2005). Fabrication and characteristics of Schottky diode based on composite organic semiconductors. *Composites Science and Technology*, 65(3-4), 677-681.
- ❖ Gupta, V. K., Singh, A. K., & Gupta, B. (2006). A cerium (III) selective polyvinyl chloride membrane sensor based on a Schiff base complex of N, N'-bis [2-(salicylideneamino) ethyl] ethane-1, 2-diamine. *Analytica chimica acta*, 575(2), 198-204.
- ❖ Gurung, N., Ray, S., Bose, S., & Rai, V. (2013). A broader view: microbial enzymes and their relevance in industries, medicine, and beyond. *BioMed research international*, 2013.
- ❖ Hadj Youcef, M., Benabdallah, T., Ilikti, H., & Reffas, H. (2008). Equilibrium studies on the synergic liquid-liquid extraction process of copper (II) from sulphate media

- with mixtures of some bidentate mono-Schiff bases and acyclic polyether non-ionic surfactant in chloroform. *Solvent Extraction and Ion Exchange*, 26(5), 534-555.
- ❖ Han, T., Zhang, Y., He, B., Lam, J., & Tang, B. (2018). Functional Poly (dihalopentadiene)s: Stereoselective Synthesis, Aggregation-Enhanced Emission and Sensitive Detection of Explosives. *Polymers*, 10(8), 821.
 - ❖ Hassan, N. Y. (2016). Cu and Ni complexes of 2, 3 Dihydroxybenzaldehyde semicarbazone (Doctoral dissertation, Port Said University).
 - ❖ Heinz, H., Vaia, R. A., Krishnamoorti, R., & Farmer, B. L. (2007). Self-assembly of alkylammonium chains on montmorillonite: effect of chain length, head group structure, and cation exchange capacity. *Chemistry of Materials*, 19(1), 59-68.
 - ❖ Hirschorn, B., Orazem, M. E., Tribollet, B., Vivier, V., Frateur, I., & Musiani, M. (2010). Constant-phase-element behavior caused by resistivity distributions in films II. Applications. *Journal of the Electrochemical Society*, 157(12), C458-C463.
 - ❖ Hirst, A. R., Escuder, B., Miravet, J. F., & Smith, D. K. (2008). High-tech applications of self-assembling supramolecular nanostructured gel-phase materials: from regenerative medicine to electronic devices. *Angewandte Chemie International Edition*, 47(42), 8002-8018.
 - ❖ Hong, Y., Lam, J. W., & Tang, B. Z. (2009). Aggregation-induced emission: phenomenon, mechanism and applications. *Chemical communications*, (29), 4332-4353.
 - ❖ Hong, Y., Lam, J. W., & Tang, B. Z. (2011). Aggregation-induced emission. *Chemical Society Reviews*, 40(11), 5361-5388.
 - ❖ Hosseini-Monfared, H., Bikas, R., Mohammadi, S., Mancilla Percino, T., Demeshko, S., Meyer, F., & Leyva Ramirez, M. A. (2014). Synthesis, Structure, Magnetic Properties, and Catalase-like Activity of Methoxy-bridged Manganese (III) Coordination Polymer containing Hydrazone based (O, N, O) 2-Donor Ligand. *Zeitschrift für anorganische und allgemeine Chemie*, 640(2), 405-411.
 - ❖ Howlader, P., & Mukherjee, P. S. (2016). Face and edge directed self-assembly of Pd₁₂ tetrahedral nano-cages and their self-sorting. *Chemical science*, 7(9), 5893-5899.
 - ❖ Hu, R., Leung, N. L., & Tang, B. Z. (2014). AIE macromolecules: syntheses, structures and functionalities. *Chemical Society Reviews*, 43(13), 4494-4562.
 - ❖ Hu, Y., Li, C. Y., Wang, X. M., Yang, Y. H., & Zhu, H. L. (2014). 1, 3, 4-Thiadiazole: synthesis, reactions, and applications in medicinal, agricultural, and materials chemistry. *Chemical reviews*, 114(10), 5572-5610.
 - ❖ Huang, D. M., & Chandler, D. (2002). The hydrophobic effect and the influence of solute-solvent attractions. *The Journal of Physical Chemistry B*, 106(8), 2047-2053.
 - ❖ Ihara, T., Ohura, H., Shirahama, C., Furuzono, T., Shimada, H., Matsuura, H., & Kitamura, Y. (2015). Metal ion-directed dynamic splicing of DNA through global conformational change by intramolecular complexation. *Nature communications*, 6, 6640.
 - ❖ Ikkai, F., & Shibayama, M. (1999). Static inhomogeneities in thermoreversible physical gels. *Physical review letters*, 82(24), 4946.
 - ❖ Imato, K., Nishihara, M., Kanehara, T., Amamoto, Y., Takahara, A., & Otsuka, H. (2012). Self-healing of chemical gels cross-linked by diarylbibenzofuranone-based

- trigger-free dynamic covalent bonds at room temperature. *Angewandte Chemie International Edition*, 51(5), 1138-1142.
- ❖ Iskander, M. F., Labib, L., El-Din, M. N., & Tawfik, M. (1989). Organotin (IV) complexes with tridentate ligands □ I. Dimethyltin (IV) complexes with N-salicylidene derivatives of Aroylhydrazines, S-methylhydrazinecarbodithioate and 4-substituted thiosemicarbazides. *Polyhedron*, 8(23), 2755-2761.
 - ❖ Isla, H., Srebro-Hooper, M., Jean, M., Vanthuyne, N., Roisnel, T., Lunkley, J. L., & Crassous, J. (2016). Conformational changes and chiroptical switching of enantiopure bis-helicenic terpyridine upon Zn 2+ binding. *Chemical communications*, 52(35), 5932-5935.
 - ❖ Isozaki, K., Takaya, H., & Naota, T. (2007). Ultrasound-Induced Gelation of Organic Fluids with Metalated Peptides. *Angewandte Chemie International Edition*, 46(16), 2855-2857.
 - ❖ Ispir, E. (2009). The synthesis, characterization, electrochemical character, catalytic and antimicrobial activity of novel, azo-containing Schiff bases and their metal complexes. *Dyes and Pigments*, 82(1), 13-19.
 - ❖ Jafari, H., Danaee, I., Eskandari, H., & RashvandAvei, M. (2013). Electrochemical and theoretical studies of adsorption and corrosion inhibition of N, N'-bis (2-hydroxyethoxyacetophenone)-2, 2-dimethyl-1, 2-propanediimine on low carbon steel (API 5L Grade B) in acidic solution. *Industrial & Engineering Chemistry Research*, 52(20), 6617-6632.
 - ❖ Jaishankar, A., & McKinley, G. H. (2014). A fractional K-BKZ constitutive formulation for describing the nonlinear rheology of multiscale complex fluids. *Journal of Rheology*, 58(6), 1751-1788.
 - ❖ Jamil, W., Solangi, S., Ali, M., Khan, K. M., Taha, M., & Khuhawar, M. Y. (2015). Syntheses, characterization, in vitro antiglycation and DPPH radical scavenging activities of isatin salicylhydrazidehydrazone and its Mn (II), Co (II), Ni (II), Cu (II), and Zn (II) metal complexes. *Arabian Journal of Chemistry*.
 - ❖ Jeong, T., Lee, H. K., Jeong, D. C., & Jeon, S. (2005). A lead (II)-selective PVC membrane based on a Schiff base complex of N, N'-bis (salicylidene)-2, 6-pyridinediamine. *Talanta*, 65(2), 543-548.
 - ❖ Jiang, B. P., Yu, Y. X., Guo, X. L., Ding, Z. Y., Zhou, B., Liang, H., & Shen, X. C. (2018). White-emitting carbon dots with long alkyl-chain structure: Effective inhibition of aggregation caused quenching effect for label-free imaging of latent fingerprint. *Carbon*, 128, 12-20.
 - ❖ Junge, K., Papa, V., & Beller, M. (2019). Cobalt–Pincer Complexes in Catalysis. *Chemistry—A European Journal*, 25(1), 122-143.
 - ❖ Jüstel, T., Nikol, H., & Ronda, C. (1998). New developments in the field of luminescent materials for lighting and displays. *Angewandte Chemie International Edition*, 37(22), 3084-3103.
 - ❖ Kahn, A., Koch, N., & Gao, W. (2003). Electronic structure and electrical properties of interfaces between metals and π -conjugated molecular films. *Journal of Polymer Science Part B: Polymer Physics*, 41(21), 2529-2548.
 - ❖ Kamino, S., Horio, Y., Komeda, S., Minoura, K., Ichikawa, H., Horigome, J., & Hirota, S. (2010). A new class of rhodamine luminophores: design, syntheses and

- aggregation-induced emission enhancement. *Chemical Communications*, 46(47), 9013-9015.
- ❖ Karousis, N., Tagmatarchis, N., & Tasis, D. (2010). Current progress on the chemical modification of carbon nanotubes. *Chemical reviews*, 110(9), 5366-5397.
 - ❖ Kathiravan, A., Sundaravel, K., Jaccob, M., Dhinakaran, G., Rameshkumar, A., Arul Ananth, D., & Sivasudha, T. (2014). Pyrene schiff base: photophysics, aggregation induced emission, and antimicrobial properties. *The Journal of Physical Chemistry B*, 118(47), 13573-13581.
 - ❖ Katwal, R., Kaur, H., & Kapur, B. K. (2013). Applications of copper—Schiff's base complexes: a review. *Sci Rev Chem Commun*, 3, 1-15.
 - ❖ Kim, H. J., Lee, J. H., & Lee, M. (2005). Stimuli-responsive gels from reversible coordination polymers. *Angewandte Chemie International Edition*, 44(36), 5810-5814.
 - ❖ Kim, Y. H., Jeong, H. C., Kim, S. H., Yang, K., & Kwon, S. K. (2005). High-Purity-Blue and High-Efficiency Electroluminescent Devices Based on Anthracene. *Advanced Functional Materials*, 15(11), 1799-1805.
 - ❖ Kippelen, B., & Brédas, J. L. (2009). Organic photovoltaics. *Energy & Environmental Science*, 2(3), 251-261.
 - ❖ Kocuyigit, O., Kursunlu, A. N., & Guler, E. (2010). Complexation properties and synthesis of a novel Schiff base with triphenylene nucleus. *Journal of hazardous materials*, 183(1-3), 334-340.
 - ❖ Kolemen, S., Cakmak, Y., Erten-Ela, S., Altay, Y., Brendel, J., Thelakkat, M., & Akkaya, E. U. (2010). Solid-state dye-sensitized solar cells using red and near-IR absorbing bodipy sensitizers.
 - ❖ Komiya, N., Muraoka, T., Iida, M., Miyanaga, M., Takahashi, K., & Naota, T. (2011). Ultrasound-induced emission enhancement based on structure-dependent homo-and heterochiral aggregations of chiral binuclear platinum complexes. *Journal of the American Chemical Society*, 133(40), 16054-16061.
 - ❖ Kröger, M., Peleg, O., Ding, Y., & Rabin, Y. (2008). Formation of double helical and filamentous structures in models of physical and chemical gels. *Soft Matter*, 4(1), 18-28.
 - ❖ Kumar, S., Dhar, D. N., & Saxena, P. N. (2009). Applications of metal complexes of Schiff bases-A review.
 - ❖ Kurth, D. G., & Higuchi, M. (2006). Transition metal ions: weak links for strong polymers. *Soft Matter*, 2(11), 915-927.
 - ❖ Kushwah, N., Mula, S., Wadawale, A. P., Joshi, M., Gotluru, K., Kumar, M., & Jain, V. K. (2019). Synthesis and Characterization of Some BODIPY-based Substituted Salicylaldimine Schiff Bases. *Journal of Heterocyclic Chemistry*.
 - ❖ Lan, Y., Corradini, M. G., Weiss, A. G., Raghavan, S. R., & Rogers, M. A. (2015). To gel or not to gel: correlating molecular gelation with solvent parameters. *Chemical Society Reviews*, 44(17), 6035-6058.
 - ❖ Le Thuy, T., Xuan Tien, H., Dinh Hoang, V., & Khac Vu, T. (2012). Design, synthesis and in vitro antimalarial evaluation of new quinolinyldiazone derivatives. *Letters in Drug Design & Discovery*, 9(2), 163-168.
 - ❖ LeCours, S. M., DiMugno, S. G., & Therien, M. J. (1996). Exceptional Electronic Modulation of Porphyrins through meso-Arylethynyl Groups. *Electronic*

- Spectroscopy, Electronic Structure, and Electrochemistry of [5, 15-Bis [(aryl) ethynyl]-10, 20-diphenylporphinato] zinc (II) Complexes. X-ray Crystal Structures of [5, 15-Bis [(4 '-fluorophenyl) ethynyl]-10, 20-diphenylporphinato] zinc (II) and 5, 15-Bis [(4 '-methoxyphenyl) ethynyl]-10, 20-diphenylporphyrin. *Journal of the American Chemical Society*, 118(47), 11854-11864.
- ❖ Lee, H., Lee, J. H., Kang, S., Lee, J. Y., John, G., & Jung, J. H. (2011). Pyridine-based coordination polymeric hydrogel with Cu 2+ ion and its encapsulation of a hydrophobic molecule. *Chemical Communications*, 47(10), 2937-2939.
 - ❖ Lemire, J. A., Harrison, J. J., & Turner, R. J. (2013). Antimicrobial activity of metals: mechanisms, molecular targets and applications. *Nature Reviews Microbiology*, 11(6), 371-384.
 - ❖ Leong, W. L., Tam, A. Y. Y., Batabyal, S. K., Koh, L. W., Kasapis, S., Yam, V. W. W., & Vittal, J. J. (2008). Fluorescence enhancement of coordination polymeric gel. *Chemical Communications*, (31), 3628-3630.
 - ❖ Levrand, B., Fieber, W., Lehn, J. M., & Herrmann, A. (2007). Controlled release of volatile aldehydes and ketones from dynamic mixtures generated by reversible hydrazone formation. *Helvetica Chimica Acta*, 90(12), 2281-2314.
 - ❖ Li, M., Gao, Y., Yuan, Y., Wu, Y., Song, Z., Tang, B. Z., & Zheng, Q. C. (2017). One-step formulation of targeted aggregation-induced emission dots for image-guided photodynamic therapy of cholangiocarcinoma. *ACS nano*, 11(4), 3922-3932.
 - ❖ Li, Q. (Ed.). (2013). *intelligent stimuli-responsive materials: from well-defined nanostructures to applications*. John Wiley & Sons.
 - ❖ Li, Q. B., Xue, L. W., Yang, W. C., & Zhao, G. Q. (2013). Two new schiff base Ni II and Cu II complexes: synthesis and structures. *Journal of the Chilean Chemical Society*, 58(3), 1880-1883.
 - ❖ Limberg, C. (2009). What does it really take to stabilize complexes of late transition metals with terminal oxo ligands? *Angewandte Chemie International Edition*, 48(13), 2270-2273.
 - ❖ Lin, G., Peng, H., Chen, L., Nie, H., Luo, W., Li, Y., & Tang, B. Z. (2016). Improving electron mobility of tetraphenylethene-based AIEgens to fabricate nondoped organic light-emitting diodes with remarkably high luminance and efficiency. *ACS applied materials & interfaces*, 8(26), 16799-16808.
 - ❖ Lin, Q., Sun, B., Yang, Q. P., Fu, Y. P., Zhu, X., Zhang, Y. M., & Wei, T. B. (2014). A novel strategy for the design of smart supramolecular gels: controlling stimuli-response properties through competitive coordination of two different metal ions. *Chemical Communications*, 50(73), 10669-10671.
 - ❖ Lipińska, L., Rzepka, A., Ryba-Romanowski, R., Klimm, D., Ganschow, S., & Diduszko, R. (2009). Nd (III) and Yb (III) ions incorporated in Y4Al2O9 obtained by sol-gel method: synthesis, structure, crystals and luminescence. *Crystal Research and Technology: Journal of Experimental and Industrial Crystallography*, 44(2), 146-152.
 - ❖ Liu, C. G., Qiu, Y. Q., Sun, S. L., Chen, H., Li, N., & Su, Z. M. (2006). DFT study on second-order nonlinear optical properties of a series of mono Schiff-base M (II) (M= Ni, Pd, Pt) complexes. *Chemical physics letters*, 429(4-6), 570-574.
 - ❖ Liu, J., Morikawa, M. A., Lei, H., Ishiba, K., & Kimizuka, N. (2016). Hierarchical Self-Assembly of Luminescent Tartrate-Bridged Chiral Binuclear Tb (III) Complexes in Ethanol. *Langmuir*, 32(41), 10597-10603.

- ❖ Liu, X., Manzur, C., Novoa, N., Celedón, S., Carrillo, D., & Hamon, J. R. (2018). Multidentate unsymmetrically-substituted Schiff bases and their metal complexes: Synthesis, functional materials properties, and applications to catalysis. *Coordination Chemistry Reviews*, 357, 144-172.
- ❖ Liu, Y. R., He, L., Zhang, J., Wang, X., & Su, C. Y. (2009). Evolution of spherical assemblies to fibrous networked Pd (II) metallo gels from a pyridine-based tripodal ligand and their catalytic property. *Chemistry of Materials*, 21(3), 557-563.
- ❖ Liu, Y., Ai, K., & Lu, L. (2014). Polydopamine and its derivative materials: synthesis and promising applications in energy, environmental, and biomedical fields. *Chemical reviews*, 114(9), 5057-5115.
- ❖ Liu, Y., Tang, Y., Barashkov, N. N., Irgibaeva, I. S., Lam, J. W., Hu, R., & Tang, B. Z. (2010). Fluorescent chemosensor for detection and quantitation of carbon dioxide gas. *Journal of the American Chemical Society*, 132(40), 13951-13953.
- ❖ Long, D. L., Tsunashima, R., & Cronin, L. (2010). Polyoxometalates: building blocks for functional nanoscale systems. *Angewandte Chemie International Edition*, 49(10), 1736-1758.
- ❖ Lorcy, D., Bellec, N., Fourmigué, M., & Avarvari, N. (2009). Tetrathiafulvalene-based group XV ligands: Synthesis, coordination chemistry and radical cation salts. *Coordination Chemistry Reviews*, 253(9-10), 1398-1438.
- ❖ Lowry, M. S., & Bernhard, S. (2006). Synthetically tailored excited states: phosphorescent, cyclometalated iridium (III) complexes and their applications. *Chemistry—A European Journal*, 12(31), 7970-7977.
- ❖ Lu, C., An, L., Fu, Q., Liu, J., Zhang, H., & Murduck, J. (2006). Schottky diodes from asymmetric metal-nanotube contacts. *Applied physics letters*, 88(13), 133501.
- ❖ Lu, H., Zheng, Y., Zhao, X., Wang, L., Ma, S., Han, X., & Gao, H. (2016). Highly efficient far Red/Near-infrared solid fluorophores: aggregation-induced emission, intramolecular charge transfer, twisted molecular conformation, and bioimaging applications. *Angewandte Chemie International Edition*, 55(1), 155-159.
- ❖ Luinstra, G. A., Haas, G. R., Molnar, F., Bernhart, V., Eberhardt, R., & Rieger, B. (2005). On the formation of aliphatic polycarbonates from epoxides with chromium (III) and aluminum (III) metal-salen complexes. *Chemistry—A European Journal*, 11(21), 6298-6314.
- ❖ Luisi, B. S., Rowland, K. D., & Moulton, B. (2007). Coordination polymer gels: synthesis, structure and mechanical properties of amorphous coordination polymers. *Chemical Communications*, (27), 2802-2804.
- ❖ Luo, J., Xie, Z., Lam, J. W., Cheng, L., Chen, H., Qiu, C., & Tang, B. Z. (2001). Aggregation-induced emission of 1-methyl-1, 2, 3, 4, 5-pentaphenylsilole. *Chemical communications*, (18), 1740-1741.
- ❖ Luo, Y., Han, Y., & Lin, J. (2007). Synthesis and luminescent properties of europium (III) schiff base complexes covalently bonded to silica xerogels. *Journal of luminescence*, 122, 83-86.
- ❖ Lv, J., Liu, T., Cai, S., Wang, X., Liu, L., & Wang, Y. (2006). Synthesis, structure and biological activity of cobalt (II) and copper (II) complexes of valine-derived schiff bases. *Journal of Inorganic Biochemistry*, 100(11), 1888-1896.
- ❖ Ma, X., Sun, R., Cheng, J., Liu, J., Gou, F., Xiang, H., & Zhou, X. (2015). Fluorescence aggregation-caused quenching versus aggregation-induced emission: A

- visual teaching technology for undergraduate chemistry students. *Journal of Chemical Education*, 93(2), 345-350.
- ❖ MacLachlan, M. J., Park, M. K., & Thompson, L. K. (1996). Coordination compounds of Schiff-base ligands derived from diaminomaleonitrile (DMN): mononuclear, dinuclear, and macrocyclic derivatives. *Inorganic chemistry*, 35(19), 5492-5499.
 - ❖ Mahajan, R. K., Kaur, I., & Kumar, M. (2003). Silver ion-selective electrodes employing Schiff base p-tert-butyl calix [4] arene derivatives as neutral carriers. *Sensors and Actuators B: Chemical*, 91(1-3), 26-31.
 - ❖ Makarević, J., Jokić, M., Raza, Z., Štefanić, Z., Kojić-Prodić, B., & Žinić, M. (2003). Chiral bis (amino alcohol) oxalamide gelators—gelation properties and supramolecular organization: racemate versus pure enantiomer gelation. *Chemistry—A European Journal*, 9(22), 5567-5580.
 - ❖ Manna, A. K., Rout, K., Chowdhury, S., & Patra, G. K. (2019). A dual-mode highly selective and sensitive Schiff base chemosensor for fluorescent colorimetric detection of Ni²⁺ and colorimetric detection of Cu²⁺. *Photochemical & Photobiological Sciences*.
 - ❖ Marahel, F., Ghaedi, M., Montazerzohori, M., Biyareh, M. N., Kokhdan, S. N., & Soylak, M. (2011). Solid-phase extraction and determination of trace amount of some metal ions on Duolite XAD 761 modified with a new Schiff base as chelating agent in some food samples. *Food and Chemical Toxicology*, 49(1), 208-214.
 - ❖ Martínez-Calvo, M., Kotova, O., Möbius, M. E., Bell, A. P., McCabe, T., Boland, J. J., & Gunnlaugsson, T. (2015). Healable luminescent self-assembly supramolecular metallo gels possessing lanthanide (Eu/Tb) dependent rheological and morphological properties. *Journal of the American Chemical Society*, 137(5), 1983-1992.
 - ❖ Mecking, S. (2000). Cationic nickel and palladium complexes with bidentate ligands for the C/C linkage of olefins. *Coordination Chemistry Reviews*, 203(1), 325-351.
 - ❖ Mei, J., Hong, Y., Lam, J. W., Qin, A., Tang, Y., & Tang, B. Z. (2014). Aggregation-induced emission: the whole is more brilliant than the parts. *Advanced materials*, 26(31), 5429-5479.
 - ❖ Mei, J., Leung, N. L., Kwok, R. T., Lam, J. W., & Tang, B. Z. (2015). Aggregation-induced emission: together we shine, united we soar! *Chemical reviews*, 115(21), 11718-11940.
 - ❖ Melaimi, M., Soleilhavoup, M., & Bertrand, G. (2010). Stable cyclic carbenes and related species beyond diaminocarbenes. *Angewandte Chemie International Edition*, 49(47), 8810-8849.
 - ❖ Miao, W., Yang, D., & Liu, M. (2015). Multiple-Stimulus-Responsive Supramolecular Gels and Regulation of Chiral Twists: The Effect of Spacer Length. *Chemistry—A European Journal*, 21(20), 7562-7570.
 - ❖ Miao, W., Zhang, L., Wang, X., Cao, H., Jin, Q., & Liu, M. (2013). A Dual-Functional Metallogel of Amphiphilic Copper (II) Quinolinol: Redox Responsiveness and Enantioselectivity. *Chemistry—A European Journal*, 19(9), 3029-3036.
 - ❖ Mitsui, C., Okamoto, T., Yamagishi, M., Tsurumi, J., Yoshimoto, K., Nakahara, K., & Uemura, T. (2014). High-Performance Solution-Processable N-Shaped Organic

- Semiconducting Materials with Stabilized Crystal Phase. *Advanced Materials*, 26(26), 4546-4551.
- ❖ Mitsumoto, K., Cameron, J. M., Wei, R. J., Nishikawa, H., Shiga, T., Nihei, M., & Oshio, H. (2017). A Multi-Redox Responsive Cyanometalate-Based Metallogel. *Chemistry—A European Journal*, 23(7), 1502-1506.
 - ❖ Miyata, T., Asami, N., & Uragami, T. (1999). A reversibly antigen-responsive hydrogel. *Nature*, 399(6738), 766.
 - ❖ Mohamed, G. G., Ali, T. A., El-Shahat, M. F., Al-Sabagh, A. M., Migahed, M. A., & Khaled, E. (2010). Potentiometric determination of cetylpyridinium chloride using a new type of screen-printed ion selective electrodes. *Analytica chimica acta*, 673(1), 79-87.
 - ❖ Mohamed, G. G., Omar, M. M., & Hindy, A. M. (2005). Synthesis, characterization and biological activity of some transition metals with Schiff base derived from 2-thiophene carboxaldehyde and aminobenzoic acid. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 62(4-5), 1140-1150.
 - ❖ More, M. S., Joshi, P. G., Mishra, Y. K., & Khanna, P. K. (2019). Metal complexes driven from Schiff bases and semicarbazones for biomedical and allied applications: a review. *Materials Today Chemistry*, 14, 100195.
 - ❖ Mukherjee, A. J., Zade, S. S., Singh, H. B., & Sunoj, R. B. (2010). Organoselenium chemistry: role of intramolecular interactions. *Chemical Reviews*, 110(7), 4357-4416.
 - ❖ Nagasawa, J. I., Wakahara, S., Matsumoto, H., Kihara, H., & Yoshida, M. (2015). Effects of polyethylene spacer length in polymeric electrolytes on gelation of ionic liquids and ionogel properties. *Journal of Polymer Science Part A: Polymer Chemistry*, 53(2), 249-255.
 - ❖ Nakamura, M., Sanji, T., & Tanaka, M. (2011). Fluorometric sensing of biogenic amines with aggregation-induced emission-active tetraphenylethenes. *Chemistry—A European Journal*, 17(19), 5344-5349.
 - ❖ Naota, T., & Koori, H. (2005). Molecules that assemble by sound: an application to the instant gelation of stable organic fluids. *Journal of the American Chemical Society*, 127(26), 9324-9325.
 - ❖ Nath, M., & Saini, P. K. (2011). Chemistry and applications of organotin (IV) complexes of Schiff bases. *Dalton Transactions*, 40(27), 7077-7121.
 - ❖ Nayar, C. R., & Ravikumar, R. (2014). Second-order nonlinearities of Schiff bases derived from salicylaldehyde and their metal complexes. *Journal of Coordination Chemistry*, 67(1), 1-16.
 - ❖ Neves, A., Rossi, L. M., Bortoluzzi, A. J., Szpoganicz, B., Wiezbicki, C., Schwingel, E., & Ostrovsky, S. (2002). Catecholase activity of a series of dicopper (II) complexes with variable Cu—OH (phenol) moieties. *Inorganic chemistry*, 41(7), 1788-1794.
 - ❖ Nie, H., Hu, K., Cai, Y., Peng, Q., Zhao, Z., Hu, R., & Tang, B. Z. (2017). Tetraphenylfuran: aggregation-induced emission or aggregation-caused quenching? *Materials Chemistry Frontiers*, 1(6), 1125-1129.
 - ❖ Ning, Z., Chen, Z., Zhang, Q., Yan, Y., Qian, S., Cao, Y., & Tian, H. (2007). Aggregation-induced emission (AIE) -active starburst triarylamine fluorophores as potential non-doped red emitters for organic light-emitting diodes and Cl₂ gas chemodosimeter. *Advanced Functional Materials*, 17(18), 3799-3807.

- ❖ Noh, M., Kim, T., Lee, H., Kim, C. K., Joo, S. W., & Lee, K. (2010). Fluorescence quenching caused by aggregation of water-soluble CdSe quantum dots. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 359(1-3), 39-44.
- ❖ Ogi, S., Stepanenko, V., Thein, J., & Würthner, F. (2016). Impact of alkyl spacer length on aggregation pathways in kinetically controlled supramolecular polymerization. *Journal of the American Chemical Society*, 138(2), 670-678.
- ❖ Ooi, T., Taniguchi, M., Kameda, M., & Maruoka, K. (2002). Direct asymmetric aldol reactions of glycine Schiff base with aldehydes catalyzed by chiral quaternary ammonium salts. *Angewandte Chemie International Edition*, 41(23), 4542-4544.
- ❖ Oylumluoglu, G., & Oner, J. (2017, October). Preparation and characterization of Schiff base Cu (II) complex and its applications on textile materials. In *IOP Conference Series: Materials Science and Engineering* (Vol. 254, No. 10, p. 102009). IOP Publishing.
- ❖ P. Chen, Q. Li, S. Grindy and N. H. Andersen, *J. Am. Chem. Soc.*, 2015, 137, 11590
- ❖ Panchal, P. K., Parekh, H. M., Pansuriya, P. B., & Patel, M. N. (2006). Bactericidal activity of different oxovanadium (IV) complexes with Schiff bases and application of chelation theory. *Journal of enzyme inhibition and medicinal chemistry*, 21(2), 203-209.
- ❖ Pandey, V. K., Dixit, M. K., Manneville, S., Bucher, C., & Dubey, M. (2017). A multi-stimuli responsive conductive sonometallogel: a mechanistic insight into the role of ultrasound in gelation. *Journal of Materials Chemistry A*, 5(13), 6211-6218.
- ❖ Pandey, V. K., Singh, V. K., Chandra, S., & Hasan, S. H. (2019). Coordination polymeric fluorescent gel: effect of removal of branch substituents of the central core over properties. *Journal of Coordination Chemistry*, 1-10.
- ❖ Papadopoulos, M. G., Sadlej, A. J., & Leszczynski, J. (2006). *Non-linear optical properties of matter* (pp. 655-692). Dordrecht: Springer.
- ❖ Parekh, H. M., Mehta, S. R., & Patel, M. N. (2006). Synthesis, structural characterization, and antifungal activity of Schiff bases and their transition metal mixed-ligand complexes. *Russian journal of inorganic chemistry*, 51(1), 67-72.
- ❖ Parrott, E. P., Tan, N. Y., Hu, R., Zeitler, J. A., Tang, B. Z., & Pickwell-MacPherson, E. (2014). Direct evidence to support the restriction of intramolecular rotation hypothesis for the mechanism of aggregation-induced emission: temperature resolved terahertz spectra of tetraphenylethene. *Materials Horizons*, 1(2), 251-258.
- ❖ Patange, A. N., Yadav, U. M., Desai, P. A., & Singare, P. U. (2015). Synthesis of some Novel Halogenated Platinum (II) Complexes of Active Schiff's Base Ligand Derived from 5-Bromo Isatin and Evaluation of their Antibacterial Activity. *World Scientific News*, (10), 32-43.
- ❖ Patange, A. N., Yadav, U. M., Desai, P. A., & Singare, P. U. (2015). Synthesis and Antimicrobial Activities of Novel Palladium (II) Complexes of Active Schiff's Base Ligand Derived from 5-Bromo Isatin. *International Letters of Chemistry, Physics and Astronomy*, 52, 22-27.
- ❖ Patil, R. H., Kalam Khan, F. A., Jadhav, K., Damale, M., Akber Ansari, S., Alkahtani, H. M., & Sangshetti, J. N. (2018). Fungal biofilm inhibition by piperazine-sulphonamide linked Schiff bases: Design, synthesis, and biological evaluation. *Archiv der Pharmazie*, 351(3-4), 1700354.

- ❖ Paulusse, J. M., Van Beek, D. J. M., & Sijbesma, R. P. (2007). Reversible switching of the sol– gel transition with ultrasound in rhodium (I) and iridium (I) coordination networks. *Journal of the American Chemical Society*, 129(8), 2392-2397.
- ❖ Peng, J., Liu, K., Liu, J., Zhang, Q., Feng, X., & Fang, Y. (2008). New dicholesteryl-based gelators: chirality and spacer length effect. *Langmuir*, 24(7), 2992-3000.
- ❖ Peng, Q., Li, W., Zhang, S., Chen, P., Li, F., & Ma, Y. (2013). Evidence of the Reverse Intersystem Crossing in Intra-Molecular Charge-Transfer Fluorescence-Based Organic Light-Emitting Devices through Magneto-Electroluminescence Measurements. *Advanced Optical Materials*, 1(5), 362-366.
- ❖ Pinzauti, S., Papeschi, G., & La Porta, E. (1983). Potentiometric titration of thiols, cationic surfactants and halides using a solid-state silver—silver sulphide electrode. *Journal of pharmaceutical and biomedical analysis*, 1(1), 47-53.
- ❖ Pirrung, M. C., Pansare, S. V., Sarma, K. D., Keith, K. A., & Kern, E. R. (2005). Combinatorial optimization of isatin- β -thiosemicarbazones as anti-poxvirus agents. *Journal of medicinal chemistry*, 48(8), 3045-3050.
- ❖ Po, C., Tam, A. Y. Y., & Yam, V. W. W. (2014). Tuning of spectroscopic properties via variation of the alkyl chain length: A systematic study of molecular structural changes on self-assembly of amphiphilic sulfonate-pendant platinum (II) bzimpy complexes in aqueous medium. *Chemical Science*, 5(7), 2688-2695.
- ❖ Potara, M., Jakab, E., Damert, A., Popescu, O., Canpean, V., & Astilean, S. (2011). Synergistic antibacterial activity of chitosan–silver nanocomposites on *Staphylococcus aureus*. *Nanotechnology*, 22(13), 135101.
- ❖ Pradeep, C. P., & Das, S. K. (2013). Coordination and supramolecular aspects of the metal complexes of chiral N-salicyl- β -amino alcohol Schiff base ligands: Towards understanding the roles of weak interactions in their catalytic reactions. *Coordination Chemistry Reviews*, 257(11-12), 1699-1715.
- ❖ Prakash, D. (2017). Biophysical And Biological Studies Of Co (II) Cu (II) And Zn (II) Complexes Of Amino Acid Based Ligands As Model Compounds In Search Of Anticancer Drugs.
- ❖ Praveen, V. K., George, S. J., & Ajayaghosh, A. (2006, July). Self-Assembled Fibrillar Networks of Oligo (p-phenylenevinylene) Based Organogelators. In *Macromolecular Symposia* (Vol. 241, No. 1, pp. 1-8). Weinheim: WILEY-VCH Verlag.
- ❖ Priyadarshy, S., Therien, M. J., & Beratan, D. N. (1996). Acetylenyl-linked, porphyrin-bridged, donor– acceptor molecules: a theoretical analysis of the molecular first hyperpolarizability in highly conjugated push– pull chromophore structures. *Journal of the American Chemical Society*, 118(6), 1504-1510.
- ❖ Puigmartí-Luis, J., Laukhin, V., Pérez del Pino, Á, Vidal-Gancedo, J., Rovira, C., Laukhina, E., & Amabilino, D. B. (2007). Supramolecular conducting nanowires from organogels. *Angewandte Chemie International Edition*, 46(1-2), 238-241.
- ❖ Pytlakowska, K., Kozik, V., & Dabioch, M. (2013). Complex-forming organic ligands in cloud-point extraction of metal ions: a review. *Talanta*, 110, 202-228.
- ❖ Qin, W., Li, K., Feng, G., Li, M., Yang, Z., Liu, B., & Tang, B. Z. (2014). Bright and Photostable Organic Fluorescent Dots with Aggregation-Induced Emission

- Characteristics for Noninvasive Long-Term Cell Imaging. *Advanced Functional Materials*, 24(5), 635-643.
- ❖ Qin, W., Long, S., Panunzio, M., & Biondi, S. (2013). Schiff bases: A short survey on an evergreen chemistry tool. *Molecules*, 18(10), 12264-12289.
 - ❖ Quan, M., Sanchez, D., Wasylikiw, M. F., & Smith, D. K. (2007). Voltammetry of quinones in unbuffered aqueous solution: reassessing the roles of proton transfer and hydrogen bonding in the aqueous electrochemistry of quinones. *Journal of the American Chemical Society*, 129(42), 12847-12856.
 - ❖ Radecka, M., Rekas, M., Tenczek-Zajac, A., & Zakrzewska, K. (2008). Importance of the band gap energy and flat band potential for application of modified TiO₂ photoanodes in water photolysis. *Journal of power sources*, 181(1), 46-55.
 - ❖ Raman, N., Johnson Raja, S., & Sakthivel, A. (2009). Transition metal complexes with Schiff-base ligands: 4-aminoantipyrine based derivatives—a review. *Journal of Coordination Chemistry*, 62(5), 691-709.
 - ❖ Ranford, J. D., Vittal, J. J., & Wang, Y. M. (1998). Dicopper (II) Complexes of the Antitumor Analogues Acylbis (salicylaldehyde hydrazones) and Crystal Structures of Monomeric [Cu₂ (1, 3-propanedioyl bis (salicylaldehyde hydrazone))(H₂O) 2]⊙(ClO₄) 2⊙ 3H₂O and Polymeric [{Cu₂ (1, 6-hexanedioyl bis (salicylaldehyde hydrazone))(C₂H₅OH) 2} m]⊙(ClO₄) 2 m⊙ m (C₂H₅OH). *Inorganic chemistry*, 37(6), 1226-1231.
 - ❖ Ratera, I., & Veciana, J. (2012). Playing with organic radicals as building blocks for functional molecular materials. *Chemical Society Reviews*, 41(1), 303-349.
 - ❖ Rauf, A., Shah, A., Munawar, K. S., Khan, A. A., Abbasi, R., Yameen, M. A., & Kraatz, H. B. (2017). Synthesis, spectroscopic characterization, DFT optimization and biological activities of Schiff bases and their metal (II) complexes. *Journal of Molecular Structure*, 1145, 132-140.
 - ❖ Rocha, J., Carlos, L. D., Paz, F. A. A., & Ananias, D. (2011). Luminescent multifunctional lanthanides-based metal-organic frameworks. *Chemical Society Reviews*, 40(2), 926-940.
 - ❖ Roy, P., & Manassero, M. (2010). Tetranuclear copper (II)–Schiff-base complexes as active catalysts for oxidation of cyclohexane and toluene. *Dalton Transactions*, 39(6), 1539-1545.
 - ❖ Saito, H., Hoffman, A. S., & Ogawa, H. I. (2007). Delivery of doxorubicin from biodegradable PEG hydrogels having Schiff base linkages. *Journal of Bioactive and Compatible Polymers*, 22(6), 589-601.
 - ❖ Sakong, C., Kim, H. J., Kim, S. H., Namgoong, J. W., Park, J. H., Ryu, J. H., & Kim, J. P. (2012). Synthesis and applications of new triphenylamine dyes with donor–donor–(bridge)–acceptor structure for organic dye-sensitized solar cells. *New Journal of Chemistry*, 36(10), 2025-2032.
 - ❖ Sangeetha, N. M., & Maitra, U. (2005). Supramolecular gels: Functions and uses. *Chemical Society Reviews*, 34(10), 821-836.
 - ❖ Santini, C., Pellei, M., Gandin, V., Porchia, M., Tisato, F., & Marzano, C. (2013). Advances in copper complexes as anticancer agents. *Chemical reviews*, 114(1), 815-862.

- ❖ Savalia, R. V., Patel, A. P., Trivedi, P. T., Gohel, H. R., & Khetani, D. B. (2013). Rapid and economic synthesis of Schiff base of salicylaldehyde by microwave irradiation. *Research Journal of Chemical Sciences*
- ❖ Sebastian, M. (2010). Transition metal complexes of quinoxaline based Schiff base ligands: Synthesis, characterization and catalytic activity study (Doctoral dissertation, CUSAT).
- ❖ Segarra-Maset, M. D., Nebot, V. J., Miravet, J. F., & Escuder, B. (2013). Control of molecular gelation by chemical stimuli. *Chemical Society Reviews*, 42(17), 7086-7098.
- ❖ Senge, M. O., Fazekas, M., Notaras, E. G., Blau, W. J., Zawadzka, M., Locos, O. B., & Ni Mhuirheartaigh, E. M. (2007). Nonlinear optical properties of porphyrins. *Advanced Materials*, 19(19), 2737-2774.
- ❖ Shamsipur, M., Yousefi, M., & Ganjali, M. R. (2000). PVC-based 1, 3, 5-trithiane sensor for cerium (III) ions. *Analytical chemistry*, 72(11), 2391-2394.
- ❖ Shamsipur, M., Yousefi, M., Hosseini, M., Ganjali, M. R., Sharghi, H., & Naeimi, H. (2001). A schiff base complex of Zn (II) as a neutral carrier for highly selective PVC membrane sensors for the sulfate ion. *Analytical chemistry*, 73(13), 2869-2874.
- ❖ Sharma, K., Kaith, B. S., Kumar, V., Kalia, S., Kumar, V., & Swart, H. C. (2014). Water retention and dye adsorption behavior of Gg-cl-poly (acrylic acid-aniline) based conductive hydrogels. *Geoderma*, 232, 45-55.
- ❖ Sharma, M., Chauhan, K., Srivastava, R. K., Singh, S. V., Srivastava, K., Saxena, J. K., & Chauhan, P. M. (2014). Design and Synthesis of a New Class of 4-Aminoquinolinyl-and 9-Anilinoacridinyl Schiff Base Hydrazones as Potent Antimalarial Agents. *Chemical biology & drug design*, 84(2), 175-181.
- ❖ Sheikh, C., Hossain, M. S., Easmin, M. S., Islam, M. S., & Rashid, M. (2004). Evaluation of in vitro antimicrobial and in vivo cytotoxic properties of some novel titanium-based coordination complexes. *Biological and Pharmaceutical Bulletin*, 27(5), 710-713.
- ❖ Shi, L., Mao, W. J., Yang, Y., & Zhu, H. L. (2009). Synthesis, characterization, and biological activity of a Schiff-base Zn (II) complex. *Journal of Coordination Chemistry*, 62(21), 3471-3477.
- ❖ Shibuguchi, T., Mihara, H., Kuramochi, A., Ohshima, T., & Shibasaki, M. (2007). Catalytic Asymmetric Phase-Transfer Michael Reaction and Mannich-Type Reaction of Glycine Schiff Bases with Tartrate-Derived Diammonium Salts. *Chemistry—An Asian Journal*, 2(6), 794-801.
- ❖ Shumate, W. J., Mattern, D. L., Jaiswal, A., Dixon, D. A., White, T. R., Burgess, J., & Metzger, R. M. (2006). Spectroscopy and Rectification of Three Donor–Sigma–Acceptor Compounds, Consisting of a One-Electron Donor (Pyrene or Ferrocene), a One-Electron Acceptor (Perylenebisimide), and a C19 Swallowtail. *The Journal of Physical Chemistry B*, 110(23), 11146-11159.
- ❖ Siddhanta, S. K., & Gangopadhyay, R. (2005). Conducting polymer gel: formation of a novel semi-IPN from polyaniline and crosslinked poly (2-acrylamido-2-methyl propanesulphonic acid). *Polymer*, 46(9), 2993-3000.
- ❖ Singh, A. K., Gupta, V. K., & Gupta, B. (2007). Chromium (III) selective membrane sensors based on Schiff bases as chelating ionophores. *Analytica chimica acta*, 585(1), 171-178.

- ❖ Singh, A., Uddin, M. A., Sudarshan, T., & Koley, G. (2014). Tunable Reverse-Biased Graphene/Silicon Heterojunction Schottky Diode Sensor. *Small*, 10(8), 1555-1565.
- ❖ Singh, N., Purthi, P. K., Sachdev, A., & Gupta, S. (2003). Disposable diapers: safe and effective. *The Indian Journal of Pediatrics*, 70(9), 721-722.
- ❖ Singh, R. S., Kumar, A., Mukhopadhyay, S., Sharma, G., Koch, B., & Pandey, D. S. (2016). An Unconventional Mechanistic Insight on Aggregation Induced Emission in Novel Boron Dipyrromethenes and Their Rational Biological Realizations. *The Journal of Physical Chemistry C*, 120(39), 22605-22614.
- ❖ Sinha, D., Tiwari, A. K., Singh, S., Shukla, G., Mishra, P., Chandra, H., & Mishra, A. K. (2008). Synthesis, characterization and biological activity of Schiff base analogues of indole-3-carboxaldehyde. *European journal of medicinal chemistry*, 43(1), 160-165.
- ❖ Soliman, A. A. (2001). Thermogravimetric and spectroscopic studies on cadmium complexes with two salicylidene thiophenol Schiff bases. *Journal of thermal analysis and calorimetry*, 63(1), 221-231.
- ❖ Soliman, A. A., & Linert, W. (1999). Investigations on new transition metal chelates of the 3-methoxy-salicylidene-2-aminothiophenol Schiff base. *Thermochimica acta*, 338(1-2), 67-75.
- ❖ Sönmez, M., Berber, İ., & Akbaş, E. (2006). Synthesis, antibacterial and antifungal activity of some new pyridazinone metal complexes. *European Journal of Medicinal Chemistry*, 41(1), 101-105.
- ❖ Souza, A. O. D., Galetti, F., Silva, C. L., Bicalho, B., Parma, M. M., Fonseca, S. F., & Andrade-Neto, M. (2007). Antimycobacterial and cytotoxicity activity of synthetic and natural compounds. *Química Nova*, 30(7), 1563-1566.
- ❖ Speiser, F., Braunstein, P., & Saussine, L. (2005). Catalytic ethylene dimerization and oligomerization: recent developments with nickel complexes containing P, N-chelating ligands. *Accounts of chemical research*, 38(10), 784-793.
- ❖ Steed, J. W. (2010). Anion-tuned supramolecular gels: a natural evolution from urea supramolecular chemistry. *Chemical Society Reviews*, 39(10), 3686-3699.
- ❖ Stuart, M. A. C., Huck, W. T., Genzer, J., Müller, M., Ober, C., Stamm, M., & Winnik, F. (2010). Emerging applications of stimuli-responsive polymer materials. *Nature materials*, 9(2), 101.
- ❖ Sugiyasu, K., Fujita, N., & Shinkai, S. (2004). Visible-light-harvesting organogel composed of cholesterol-based perylene derivatives. *Angewandte Chemie International Edition*, 43(10), 1229-1233.
- ❖ Sun, M., Sun, J., Yang, Y., Wang, Y., Lu, H., Ouyang, J., & Na, N. (2019). Accelerating ambient soft-landing for the separation of aggregation-induced emission luminogens with unique properties. *Talanta*, 197, 36-41.
- ❖ Sun, R., Zhang, H. B., Liu, J., Xie, X., Yang, R., Li, Y., & Yu, Z. Z. (2017). Highly conductive transition metal carbide/carbonitride (MXene)@ polystyrene nanocomposites fabricated by electrostatic assembly for highly efficient electromagnetic interference shielding. *Advanced Functional Materials*, 27(45), 1702807.
- ❖ Sun, Z., Huang, Q., He, T., Li, Z., Zhang, Y., & Yi, L. (2014). Multistimuli-Responsive Supramolecular Gels: Design Rationale, Recent Advances, and Perspectives. *ChemPhysChem*, 15(12), 2421-2430.

- ❖ Sutar, P., & Maji, T. K. (2016). Coordination polymer gels: soft metal–organic supramolecular materials and versatile applications. *Chemical Communications*, 52(52), 8055-8074.
- ❖ Svobodová, H., Lahtinen, M., Wimmer, Z., & Kolehmainen, E. (2012). A steroid-based gelator of A (LS) 2 type: tuning gel properties by metal coordination. *Soft Matter*, 8(30), 7840-7847.
- ❖ Tada, A., Geng, Y., Wei, Q., Hashimoto, K., & Tajima, K. (2011). Tailoring organic heterojunction interfaces in bilayer polymer photovoltaic devices. *Nature materials*, 10(6), 450.
- ❖ Tam, A. Y. Y., & Yam, V. W. W. (2013). Recent advances in metallogels. *Chemical Society Reviews*, 42(4), 1540-1567.
- ❖ Tam, A. Y. Y., Wong, K. M. C., Wang, G., & Yam, V. W. W. (2007). Luminescent metallogels of platinum (ii) terpyridyl complexes: interplay of metal··· metal, π – π and hydrophobic–hydrophobic interactions on gel formation. *Chemical Communications*, (20), 2028-2030.
- ❖ Tarafder, M. T. H., Jin, K. T., Crouse, K. A., Ali, A. M., Yamin, B. M., & Fun, H. K. (2002). Coordination chemistry and bioactivity of Ni²⁺, Cu²⁺, Cd²⁺ and Zn²⁺ complexes containing bidentate Schiff bases derived from S-benzylthiocarbamate and the X-ray crystal structure of bis [S-benzyl- β -N-(5-methyl-2-furylmethylene) dithiocarbamate] cadmium (II). *Polyhedron*, 21(25-26), 2547-2554.
- ❖ Tariq, M., Muhammad, N., Sirajuddin, M., Ali, S., Shah, N. A., Khalid, N., & Khan, M. R. (2013). Synthesis, spectroscopic characterization, X-ray structures, biological screenings, DNA interaction study and catalytic activity of organotin (IV) 3-(4-fluorophenyl)-2-methylacrylic acid derivatives. *Journal of Organometallic Chemistry*, 723, 79-89.
- ❖ Terech, P., & Weiss, R. G. (1997). Low molecular mass gelators of organic liquids and the properties of their gels. *Chemical reviews*, 97(8), 3133-3160.
- ❖ Terech, P., Yan, M., Maréchal, M., Royal, G., Galvez, J., & Velu, S. K. (2013). Characterization of strain recovery and “self-healing” in a self-assembled metallo-gel. *Physical Chemistry Chemical Physics*, 15(19), 7338-7344.
- ❖ Tidwell, T. T. (2008). Hugo (Ugo) Schiff, Schiff bases, and a century of β -lactam synthesis. *Angewandte Chemie International Edition*, 47(6), 1016-1020.
- ❖ Tiwari, K., Mishra, M., & Singh, V. P. (2013). A highly sensitive and selective fluorescent sensor for Al³⁺ ions based on thiophene-2-carboxylic acid hydrazide Schiff base. *RSC Advances*, 3(30), 12124-12132.
- ❖ Tongay, S., Lemaitre, M., Miao, X., Gila, B., Appleton, B. R., & Hebard, A. F. (2012). Rectification at graphene-semiconductor interfaces: zero-gap semiconductor-based diodes. *Physical Review X*, 2(1), 011002.
- ❖ Travascio, P., Witting, P. K., Mauk, A. G., & Sen, D. (2001). The peroxidase activity of a hemin– DNA oligonucleotide complex: free radical damage to specific guanine bases of the DNA. *Journal of the American Chemical Society*, 123(7), 1337-1348.
- ❖ Tu, T., Fang, W., Bao, X., Li, X., & Dötz, K. H. (2011). Visual chiral recognition through enantioselective metallogel collapsing: synthesis, characterization, and application of platinum–steroid low-molecular-mass gelators. *Angewandte Chemie International Edition*, 50(29), 6601-6605.

- ❖ Van Herpt, J. T., Stuart, M. C., Browne, W. R., & Feringa, B. L. (2013). Mechanically induced gel formation. *Langmuir*, 29(28), 8763-8767.
- ❖ Van Slyke, S. A., Chen, C. H., & Tang, C. W. (1996). Organic electroluminescent devices with improved stability. *Applied physics letters*, 69(15), 2160-2162.
- ❖ Venkataraman, S., Hedrick, J. L., Ong, Z. Y., Yang, C., Ee, P. L. R., Hammond, P. T., & Yang, Y. Y. (2011). The effects of polymeric nanostructure shape on drug delivery. *Advanced drug delivery reviews*, 63(14-15), 1228-1246.
- ❖ Vigato, P. A., & Tamburini, S. (2004). The challenge of cyclic and acyclic Schiff bases and related derivatives. *Coordination Chemistry Reviews*, 248(17-20), 1717-2128.
- ❖ Wang, C., Chen, Q., Sun, F., Zhang, D., Zhang, G., Huang, Y., & Zhu, D. (2010). Multistimuli responsive organogels based on a new gelator featuring tetrathiafulvalene and azobenzene groups: Reversible tuning of the gel–sol transition by redox reactions and light irradiation. *Journal of the American Chemical Society*, 132(9), 3092-3096.
- ❖ Wang, C., Zhang, T., & Lin, W. (2011). Rational synthesis of noncentrosymmetric metal–organic frameworks for second-order nonlinear optics. *Chemical reviews*, 112(2), 1084-1104.
- ❖ Wang, F., Wen, J., Huang, L., Huang, J., & Ouyang, J. (2012). A highly sensitive “switch-on” fluorescent probe for protein quantification and visualization based on aggregation-induced emission. *Chemical Communications*, 48(59), 7395-7397.
- ❖ Wang, L., Qin, W., Tang, X., Dou, W., & Liu, W. (2011). Development and applications of fluorescent indicators for Mg²⁺ and Zn²⁺. *The Journal of Physical Chemistry A*, 115(9), 1609-1616.
- ❖ Wang, M., Zhang, G., Zhang, D., Zhu, D., & Tang, B. Z. (2010). Fluorescent bio/chemosensors based on silole and tetraphenylethene luminogens with aggregation-induced emission feature. *Journal of Materials Chemistry*, 20(10), 1858-1867.
- ❖ Wang, P. H., Keck, J. G., Lien, E. J., & Lai, M. M. (1990). Design, synthesis, testing, and quantitative structure-activity relationship analysis of substituted salicylaldehyde Schiff bases of 1-amino-3-hydroxyguanidine tosylate as new antiviral agents against coronavirus. *Journal of medicinal chemistry*, 33(2), 608-614.
- ❖ Wang, P., Xing, H., Xia, D., & Ji, X. (2015). A novel supramolecular polymer gel constructed by crosslinking pillar [5] arene-based supramolecular polymers through metal–ligand interactions. *Chemical Communications*, 51(98), 17431-17434.
- ❖ Wang, X. D., & Wolfbeis, O. S. (2012). Fiber-optic chemical sensors and biosensors (2008–2012). *Analytical chemistry*, 85(2), 487-508.
- ❖ Wang, X. S., Tang, Y. Z., Huang, X. F., Qu, Z. R., Che, C. M., Chan, P. W. H., & Xiong, R. G. (2005). Syntheses, crystal structures, and luminescent properties of three novel zinc coordination polymers with tetrazolyl ligands. *Inorganic chemistry*, 44(15), 5278-5285.
- ❖ Wei, P., Yan, X., & Huang, F. (2015). Supramolecular polymers constructed by orthogonal self-assembly based on host–guest and metal–ligand interactions. *Chemical Society Reviews*, 44(3), 815-832.
- ❖ Wen, X., & Tang, L. (2015). One-dimensional copolymer nanostructures loaded with silver nanoparticles fabricated via metallogel template copolymerization and their pH

- dependent photocatalytic degradation of methylene blue. *Journal of Molecular Catalysis A: Chemical*, 399, 86-96.
- ❖ Werner, E. J., Datta, A., Jocher, C. J., & Raymond, K. N. (2008). High-relaxivity MRI contrast agents: Where coordination chemistry meets medical imaging. *Angewandte Chemie International Edition*, 47(45), 8568-8580.
 - ❖ Westcott, A., Sumbly, C. J., Walshaw, R. D., & Hardie, M. J. (2009). Metallo-gels and organo-gels with tripodal cyclotriveratrylene-type and 1, 3, 5-substituted benzene-type ligands. *New Journal of Chemistry*, 33(4), 902-912.
 - ❖ Whittell, G. R., Hager, M. D., Schubert, U. S., & Manners, I. (2011). Functional soft materials from metallopolymers and metallosupramolecular polymers. *Nature materials*, 10(3), 176.
 - ❖ Woodman, P. R., Munslow, I. J., Hitchcock, P. B., & Scott, P. (1999). Non-planar coordination of C 2-symmetric biaryl-bridged Schiff-base ligands: well-expressed chiral ligand environments for zirconium. *Journal of the Chemical Society, Dalton Transactions*, (22), 4069-4076.
 - ❖ Wu, J. N., Chen, L., Fu, T., Zhao, H. B., Guo, D. M., Wang, X. L., & Wang, Y. Z. (2018). New application for aromatic Schiff base: High efficient flame-retardant and anti-dripping action for polyesters. *Chemical Engineering Journal*, 336, 622-632.
 - ❖ Wu, N., Melan, C. F., Stevenson, K. A., Fleischel, O., Guo, H., Habib, F., & Petitjean, A. (2015). Systematic study of the synthesis and coordination of 2-(1, 2, 3-triazol-4-yl)-pyridine to Fe (II), Ni (II) and Zn (II); ion-induced folding into helicates, mesocates and larger architectures, and application to magnetism and self-selection. *Dalton Transactions*, 44(33), 14991-15005.
 - ❖ Wu, X., He, C., Wu, Y., & Chen, X. (2016). Synergistic therapeutic effects of Schiff's base cross-linked injectable hydrogels for local co-delivery of metformin and 5-fluorouracil in a mouse colon carcinoma model. *Biomaterials*, 75, 148-162.
 - ❖ Xia, C., & Qian, Y. (2016). Aggregation-induced emission enhancement and living cell imaging of novel diarylanthracene conjugated dyes. *New Journal of Chemistry*, 40(1), 144-150.
 - ❖ Xiao, H., Chen, K., Cui, D., Jiang, N., Yin, G., Wang, J., & Wang, R. (2014). Two novel aggregation-induced emission active coumarin-based Schiff bases and their applications in cell imaging. *New Journal of Chemistry*, 38(6), 2386-2393.
 - ❖ Xie, J., Qiao, J., Wang, L., Xie, J., & Qiu, Y. (2005). An azomethin-zinc complex for organic electroluminescence: Crystal structure, thermal stability and optoelectronic properties. *Inorganica chimica acta*, 358(15), 4451-4458.
 - ❖ Xing, B., Choi, M. F., & Xu, B. (2002). Design of coordination polymer gels as stable catalytic systems. *Chemistry—A European Journal*, 8(21), 5028-5032.
 - ❖ Xu, H., Chen, R., Sun, Q., Lai, W., Su, Q., Huang, W., & Liu, X. (2014). Recent progress in metal-organic complexes for optoelectronic applications. *Chemical Society Reviews*, 43(10), 3259-3302.
 - ❖ Xue, S., Qiu, X., Sun, Q., & Yang, W. (2016). Alkyl length effects on solid-state fluorescence and mechanochromic behavior of small organic luminophores. *Journal of Materials Chemistry C*, 4(8), 1568-1578.
 - ❖ Yan, X., Cook, T. R., Pollock, J. B., Wei, P., Zhang, Y., Yu, Y., & Stang, P. J. (2014). Responsive supramolecular polymer metallogel constructed by orthogonal

- coordination-driven self-assembly and host/guest interactions. *Journal of the American Chemical Society*, 136(12), 4460-4463.
- ❖ Yan, X., Wang, F., Zheng, B., & Huang, F. (2012). Stimuli-responsive supramolecular polymeric materials. *Chemical Society Reviews*, 41(18), 6042-6065.
 - ❖ Yang, L., Luo, L., Zhang, S., Su, X., Lan, J., Chen, C. T., & You, J. (2010). Self-assembly from metal-organic vesicles to globular networks: metallo-gel-mediated phenylation of indole with phenyl boronic acid. *Chemical Communications*, 46(22), 3938-3940.
 - ❖ Yang, X., Zhuang, X., Huang, Y., Jiang, J., Tian, H., Wu, D., & Feng, X. (2015). Nitrogen-enriched hierarchically porous carbon materials fabricated by graphene aerogel templated Schiff-base chemistry for high performance electrochemical capacitors. *Polymer Chemistry*, 6(7), 1088-1095.
 - ❖ Yao, L., Zhang, S., Wang, R., Li, W., Shen, F., Yang, B., & Ma, Y. (2014). Highly Efficient Near-Infrared Organic Light-Emitting Diode Based on a Butterfly-Shaped Donor-Acceptor Chromophore with Strong Solid-State Fluorescence and a Large Proportion of Radiative Excitons. *Angewandte Chemie International Edition*, 53(8), 2119-2123.
 - ❖ You, Z. L., Hou, P., Ni, L. L., & Chen, S. (2009). Influence of the steric effects of the Schiff bases and the hydrogen bonds on the bridging modes of the azide groups: Syntheses and crystal structures of three azide-bridged Schiff base zinc (II) complexes. *Inorganic Chemistry Communications*, 12(5), 444-446.
 - ❖ Yu, T., Su, W., Li, W., Hong, Z., Hua, R., & Li, B. (2007). A schiff base zinc complex and its electroluminescent properties. *Thin Solid Films*, 515(7-8), 4080-4084.
 - ❖ Yu, X., Chen, L., Zhang, M., & Yi, T. (2014). Low-molecular-mass gels responding to ultrasound and mechanical stress: towards self-healing materials. *Chemical Society Reviews*, 43(15), 5346-5371.
 - ❖ Yu, X., Ge, X., Lan, H., Li, Y., Geng, L., Zhen, X., & Yi, T. (2015). Tunable and switchable control of luminescence through multiple physical stimulations in aggregation-based monocomponent systems. *ACS applied materials & interfaces*, 7(43), 24312-24321.
 - ❖ Yuan, S., Feng, L., Wang, K., Pang, J., Bosch, M., Lollar, C., & Wang, Q. (2018). Stable metal-organic frameworks: design, synthesis, and applications. *Advanced Materials*, 30(37), 1704303.
 - ❖ Yuan, W. Z., Lu, P., Chen, S., Lam, J. W., Wang, Z., Liu, Y., & Tang, B. Z. (2010). Changing the behavior of chromophores from aggregation-caused quenching to aggregation-induced emission: development of highly efficient light emitters in the solid state. *Advanced materials*, 22(19), 2159-2163.
 - ❖ Yuan, Wang Zhang, et al. "Changing the behavior of chromophores from aggregation-caused quenching to aggregation-induced emission: development of highly efficient light emitters in the solid state." *Advanced materials* 22.19 (2010): 2159-2163.
 - ❖ Zhang, M., & Weiss, R. G. (2016). Self-assembled networks and molecular gels derived from long-chain, naturally-occurring fatty acids. *Journal of the Brazilian Chemical Society*, 27(2), 239-255.

- ❖ Zhao, W. W., Xu, J. J., & Chen, H. Y. (2014). Photoelectrochemical DNA biosensors. *Chemical reviews*, 114(15), 7421-7441.
- ❖ Zhao, Z., Lam, J. W., & Tang, B. Z. (2013). Self-assembly of organic luminophores with gelation-enhanced emission characteristics. *Soft Matter*, 9(18), 4564-4579.
- ❖ Zhao, Z., Lu, P., Lam, J. W., Wang, Z., Chan, C. Y., Sung, H. H., & Tang, B. Z. (2011). Molecular anchors in the solid state: Restriction of intramolecular rotation boosts emission efficiency of luminogen aggregates to unity. *Chemical Science*, 2(4), 672-675.
- ❖ Zhou, J., Liu, Q., Feng, W., Sun, Y., & Li, F. (2014). Upconversion luminescent materials: advances and applications. *Chemical reviews*, 115(1), 395-465.
- ❖ Zhou, Q., Dong, X., Yuan, J., Zhang, B., Lu, S., Wang, Q., & Wang, H. (2019). Reversible redox switching of concurrent luminescence and visual color change based on lanthanide metallogel. *Langmuir*, 35(47), 15344-15351.
- ❖ Zhu, G., & Dordick, J. S. (2006). Solvent effect on organogel formation by low molecular weight molecules. *Chemistry of Materials*, 18(25), 5988-5995.
- ❖ Zhuang, J., Gordon, M. R., Ventura, J., Li, L., & Thayumanavan, S. (2013). Multi-stimuli responsive macromolecules and their assemblies. *Chemical Society Reviews*, 42(17), 7421-7435.
- ❖ Zhuang, X., Zhang, F., Wu, D., & Feng, X. (2014). Graphene coupled Schiff-base porous polymers: towards nitrogen-enriched porous carbon nanosheets with ultrahigh electrochemical capacity. *Advanced materials*, 26(19), 3081-3086.