210. A.P. Bonifas, R.L. McCreery, “‘Soft’ Au, Pt and Cu Contacts for Molecular Junctions through Surface-Diffusion-Mediated Deposition”, *Nature Nanotechnology* **2010**, *5*, 612-617.

211. A. J. Bergren, R.L. McCreery, S. R. Stoyanov, S. Gusarov, A. Kovalenko, “Electronic Characteristics and Charge Transport Mechanisms for Large Area Aromatic Molecular Junctions”, *The Journal of Physical Chemistry C* **2010**, *114*, 15806.

212. Jie Ru, Bryan Szeto, Andrew Bonifas, R.L. McCreery, “Microfabrication and Integration of Diazonium-Based Aromatic Molecular Junctions”, *ACS Applied Materials & Interfaces* **2010**, *2*, 3693-3701 (highlighted in Chemical and Engineering News, April 4, **2011**, pp 41-42).

213. Peng Li, J. Chen, M. Malac, H. Yan, A. Bonifas, R.L. McCreery; “HRTEM and Nano-Beam Diffraction Analysis of Metal-Molecule Interface”, *Microscopy and Microanalysis* **2010**, *16*, 1896-1897

214. Lian C.T. Shoute, Nikola Pekas, Yiliang Wu, R.L. McCreery; “Redox Driven Conductance Changes for Resistive Memory”, *Applied Physics A* **2011**, *102*, 841-850 (invited)

215. A.J. Bergren and R. L. McCreery; “Analytical Chemistry in Molecular Electronics”, *Annual Review of Analytical Chemistry* **2011**, *4*, 173-195. Book chapter.

216. A.M. Mahmoud, A. J. Bergren, Nikola Pekas, R.L. McCreery; “Toward Integrated Molecular Electronic Devices: Characterization of Molecular Layer Integrity During Fabrication Processes”, *Advanced Functional Materials* **2011**, *21*, 2273-2281.

217. R.H. Kumar, H. Yan, R.L. McCreery and A. J. Bergren; “Electron-beam evaporated silicon as a top contact for molecular electronic device fabrication”, *Physical Chemistry Chemical Physics* **2011**, *13*, 14318-14324 (invited)

218. A.P. Bonifas, R. L. McCreery, Ken Harris; “Thermal oxidation as a simple method to increase resolution in nanoimprint lithography”, *Microelectronic Engineering* **2011**, *88*, 3256-3260.

219. A.P. Bonifas and R.L. McCreery; “Assembling Molecular Electronic Junctions One Molecule at a Time”, *Nano Letters* **2011**, *11*, 4725-4729.

220. Haijun Yan, A. J. Bergren and R.L. McCreery; “All-Carbon Molecular Tunnel Junctions”, *Journal of the American Chemical Society* **2011**, *133*, 19168-19177.

221. R.L. McCreery and A.J. Bergren; “Surface Functionalization in the Nanoscale Domain”, in *Nanofabrication: Techniques and Principles*, Maria Stepanova and Steven Dew (Eds.), Springer, NY, **2012**, 163-190.

222. R.L. McCreery; “The merger of electrochemistry and molecular electronics”, *The Chemical Record* **2012**, *12*, 149-163 (invited)

223. R.L. McCreery and M.T. McDermott; “Comment on Electrochemical Kinetics at Ordered Graphite Electrodes”, *Analytical Chemistry* **2012**, *84*, 2602-2605.

224. A.P. Bonifas and R.L. McCreery; “Solid State Spectroelectrochemistry of Redox Reactions in Polypyrrole/Oxide Molecular Heterojunctions”, *Analytical Chemistry* **2012**, *84*, 2459-2465.

225. R.L. McCreery, K.J. Mobley and J. Wu; “Electronic Junction Devices Featuring Redox Electrodes”, **2010**, U.S. Patent #7,737,433 B2.

226. R.L. McCreery, A.J. Bergren, “Diazonium reagents in molecular electronics”, chapter in *Aryl Diazonium Salts: New Coupling Agents in Polymer and Surface Science*, ed. Mohamed Chehimi, Wiley-VCH, **2012**, Chapter 10, pp 219-239 (invited)

227. S. Y. Sayed, J. A. Fereiro, H. Yan, R. L. McCreery and A.J. Bergren; “Charge transport in molecular electronic junctions: Compression of the molecular tunnel barrier in the strong coupling regime”, *Proceedings of the National Academy of Sciences* **2012**, *109*, 11498 (invited).

228. R. Kumar, R.G. Pillai, N. Pekas, Y. Wu and R.L. McCreery; “Spatially Resolved Raman Spectroelectrochemistry of Solid-State Polythiophene/Viologen Memory Devices”, *Journal of the American Chemical Society* **2012**, *134*, 14869-14876.

229. R.L. McCreery, H. Yan and A.J. Bergren; “A Critical Perspective on Molecular Electronic Junctions: There is Plenty of Room in the Middle”, *Physical Chemistry Chemical Physics* **2013,** *15*, 1065-1081.

230. H. Yan, A.J. Bergren, R.L. McCreery, M.L. Della Rocca, P. Martin, P. Lafarge, and J.C. Lacroix; “Activationless Charge Transport Across 4.5 to 22 nm in Molecular Electronic Junctions”, *Proceedings of the National Academy of Sciences* **2013**, *110*, 5326-5330.

231. J.A. Fereiro, R.L. McCreery, and A.J. Bergren; “Direct Optical Determination of Interfacial Transport Barriers in Molecular Tunnel Junctions”, *Journal of the American Chemical Society* **2013**, *135*, 9584-9587.

232. V. Rabache, J. Chaste, P. Petit, M.L. Della Rocca, P. Martin, J.C. Lacroix, R.L. McCreery, and P. Lafarge; “Direct Observation of Large Quantum Interference Effect in Anthraquinone Solid-State Junctions”, *Journal of the American Chemical Society* **2013**, *135*, 10218-10221.

233. S. Y. Sayed, A. Bayat, M. Kondratenko, Y. Leroux, P. Hapiot, and R. L. McCreery; “Bilayer Molecular Electronics: All-Carbon Electronic Junctions Containing Molecular Bilayers Made with “Click” Chemistry”, *Journal of the American Chemical Society* **2013**, *135*, 12972-12975.

234. L.C.T. Shoute, Y. Wu, R.L. McCreery; “Direct Spectroscopic Monitoring of Conductance Switching in Polythiophene Memory Devices”, *Electrochimica Acta* **2013**, *110*, 437-445.

235. B. Das, R.G. Pillai, Y. Wu, R.L. McCreery; “Redox-Gated Three-Terminal Organic Memory Devices: Effect of Composition and Environment on Performance”, *ACS Applied Materials & Interfaces* **2013**, *5*, 11052-11058.

236. R.L. McCreery, A. Bergren, S. Nagy, H. Yan, A. Bayat, M. Kondratenko; “Molecules in Circuits: a New Type of Microelectronics?”, *ECS Transactions* **2014,** *61*, 113-121.

237. R.L. McCreery, A.P. Bonifas, V. Wai-Sum Lui; “Metal Contacts for Molecular Device Junctions and Surface-Diffusion-Mediated Deposition”, **2011** U.S. Patent #8,697,562 B2.

238. B. Das, B. Szeto, D. James, Y. Wu, R.L. McCreery; “Ion Transport and Switching Speed in Redox-Gated 3-Terminal Organic Memory Devices”, *Journal of the Electrochemical Society* **2014**, *161*, H831-H838.

239. D.K. Paul, R.L. McCreery, K. Karan; “Proton Transport Property in Supported Nafion Nanothin Films by Electrochemical Impedance Spectroscopy”, *Journal of The Electrochemical Society* **2014**, *161*, F1395-F1402.

240. R.L. McCreery, A. Bergren, A. Morteza-Najarian, S.Y. Sayed, H. Yan; “Electron Transport in All-Carbon Molecular Electronic Devices”, *Faraday Discussions* **2014**, *172*, 9-25 (invited).

241. J.A. Fereiro, M. Kondratenko, A. Bergren, R.L. McCreery; “Internal Photoemission in Molecular Junctions: Parameters for Interfacial Barrier Determinations”, *Journal of the American Chemical Society* **2015**, *137*, 1296-1304.

242. R.L. McCreery, “Electron Transport and Redox Reactions in Solid-State Molecular Electronic Devices”, in *Nanoelectrochemistry*, M. V. Mirkin and S. Amemiya (Ed.), CRC Press, **2015**, 205-239.

243. R.L. McCreery, A. Bonifas, V. Lui, “Metal Contacts for Molecular Device Junctions and Surface-Diffusion-Mediated Deposition”, U.S. Patent US # 8,697,562; **2014**

244. R.L. McCreery, A. Bergren, “Two- and Three-Terminal Molecular Electronic Devices with Ballistic Electron Transport”, U.S. Patent # 9,024,297; **2015**

245. M. Kondratenko, S.R. Stoyanov, A Kovalenko, R.L. McCreery, “Theoretical Modeling of Tunneling Barriers in Carbon-Based Molecular Electronic Junctions”, *Journal of Physical Chemistry C* **2015**, *119*, 11286-11295.

246. R.L. McCreery, “Effects of electronic coupling and electrostatic potential on charge transport in carbon-based molecular electronic junctions”, *Beilstein Journal of Nanotechnology* **2016**, *7*, 32-46.

247. O. Ivashenko, A. Bergren, R.L. McCreery, “Light Emission as a Probe of Energy Losses in Molecular Junctions”, *Journal of the American Chemical Society* **2016**, *138*, 722-725.

248. A. Bergren, L. Zeer-Wanklyn, M. Semple, N. Pekas, B. Szeto, R.L. McCreery, “Musical molecules: the molecular junction as an active component in audio distortion circuits”, *Journal of Physics: Condensed Matter* **2016**, *28*, 094011.

249. A. Bayat, J-C. Lacroix, R.L. McCreery, “Control of Electronic Symmetry and Rectification through Energy Level Variations in Bilayer Molecular Junctions”, *Journal of the American Chemical Society* **2016**, *138*, 12287-12296.

250. A. Morteza-Najarian, B. Szeto, U.M. Tefashe, R.L. McCreery. “Robust All-Carbon Molecular Junctions on Flexible or Semi-Transparent Substrates Using ‘Process-Friendly’ Fabrication”, *ACS Nano* **2016**, *10*, 8918-8928.

251. O. Ivashenko, A.J. Bergren, R.L. McCreery. “Monitoring of Energy Conservation and Losses in Molecular Junctions through Characterization of Light Emission”, *Advanced Electronic Materials* **2016**, *2*, 1600351

252. S.R. Greig, A Morteza-Najarian, R.L. McCreery, A.Y. Elezzabi. “Surface plasmon driven lowering of the electron emission order in a carbon/gold bilayer film”, *Applied Physics Letters* **2016**, *109*, 221104

253. A Morteza-Najarian, R.L. McCreery, “Structure Controlled Long-Range Sequential Tunneling in Carbon-Based Molecular Junctions”, *ACS Nano* **2017,** *11*, 3542-3552

254. U. M. Tefashe, Q. V. Nguyen, F. Lafolet, J-C. Lacroix, R. L. McCreery, “Robust Bipolar Light Emission and Charge Transport in Symmetric Molecular Junctions”, *Journal of the American Chemical Society* **2017**, *139*, 7436-7439.

255. M. Supur, S. R. Smith, R. L. McCreery, “Characterization of Growth Patterns of Nanoscale Organic Films on Carbon Electrodes by Surface Enhanced Raman Spectroscopy”, Analytical Chemistry **2017**, *89*, 6463−6471

256. Q. V. Nguyen, P. Martin, D. Frath, M. L. Della Rocca, F. Lafolet, C. Barraud, P. Lafarge, V. Mukundan, D. James, R. L. McCreery, J-C. Lacroix, “Control of Rectification in Molecular Junctions: Contact Effects and Molecular Signature”, *Journal of the American Chemical Society* **2017**, *139*, 11913−11922.

257. D. D. James, A Bayat, S. R. Smith, J-C Lacroix, R.L. McCreery, Nanometric building blocks for robust multifunctional molecular junctions, *Nanoscale Horizons* **2018**, *3*, 45-52.

258. A. Morteza Najarian, R. Chen, R.J. Balla, S. Amemiya, R. L. McCreery, Ultraflat, Pristine, and Robust Carbon Electrode for Fast Electron-Transfer Kinetics, *Analytical Chemistry* **2017**, *89*, 13532-13540

259. A. Morteza Najarian, A. Bayat, R. L. McCreery, Orbital Control of Photocurrents in Large Area All-Carbon Molecular Junctions; *Journal of the American Chemical Society* **2018**, *140*, 1900-1909.

260. M. Supur, C. van Dyck, A. J. Bergren, R.L. McCreery, Bottom-up, Robust Graphene Ribbon Electronics in All-Carbon Molecular Junctions; *ACS Applied Materials & Interfaces* **2018**, *10*, 6090-6095.

261. P. Mondal, U. Tefashe, R.L. McCreery, Internal Electric Field Modulation in Molecular Electronic Devices by Atmosphere and Mobile Ions, *Journal of the American Chemical Society* **2018**, *140*, 7239-7247.

262. S.R. Smith, R.L. McCreery, Photocurrent, Photovoltage and Rectification in Large-Area Bilayer Molecular Electronic Junctions; *Advanced Electronic Materials* **2018**, 1800093.

263. M. Hayashida, K. Cui, A. Morteza Najarian, R. McCreery, N. Jehanathan, C. Pawlowicz, S. Motoki, M. Kawasaki, Y. Konyuba, M. Malac, Hole free phase plate tomography for materials sciences samples. *Micron* **2019,** *116*, 54-60.

264. R. Chen, A. Morteza-Najarian, N. Kurapati, R. J. Balla, A. Oleinick, I. Svir, C. Amatore, R. L. McCreery, S. Amemiya, Self-Inhibitory Electron Transfer of the Co(Iii)/Co(Ii)-Complex Redox Couple at Pristine Carbon Electrode. *Anal. Chem.* **2018,** *90,* 11115-11123.

265. A. J. Bergren, R.L. McCreery, “Clipped Amplifier”, US Patent 10,164,595, December 25, 2018.

266. U. M. Tefashe, Q. V Nguyen, A. Morteza Najarian, F. Lafolet, J-C. Lacroix, R.L. McCreery; Orbital Control of Long-Range Transport in Conjugated and Metal-Centered Molecular Electronic Junctions. *The Journal of Physical Chemistry C* **2018,** *122,* 29028-29038.

267. A. K. Farquhar, M. Supur, S.R. Smith, S. R. C. van Dyck, C.; McCreery, R. L.; Hybrid Graphene Ribbon/Carbon Electrodes for High-Performance Energy Storage; *Advanced Energy Materials* **2018**, *8*, 1802439

268. A. Morteza Najarian, R.L. McCreery; Long-Range Activationless Photostimulated Charge Transport in Symmetric Molecular Junctions; *ACS Nano* **2019**, 13, 867-877

269. K. Miwa, A. Morteza Najarian, R. L. McCreery, and M. Galperin; Hubbard Nonequilibrium Green’s Function Analysis of Photocurrent in Nitroazobenzene Molecular Junction; *The Journal of Physical Chemistry Letters* **2019**, *10*, 1550-1557.

270. S. K. Saxena, S. R. Smith, M. Supur, R. L. McCreery; Light-Stimulated Charge Transport in Bilayer Molecular Junctions for Photodetection. *Advanced Optical Materials* **2019,** *7*, 1901053.

271. U.M. Tefashe; C. Van Dyck; S. K. Saxena; J.-C. Lacroix; R.L. McCreery; Unipolar Injection and Bipolar Transport in Electroluminescent Ru-Centered Molecular Electronic Junctions. *The Journal of Physical Chemistry C* **2019,** *123*, 29162-29172.

272. A. M. Najarian; M. Supur, M.; R. L. McCreery, Electrostatic Redox Reactions and Charge Storage in Molecular Electronic Junctions. *The Journal of Physical Chemistry C* **2020,** *124*, 1739-1748

273. A.K. Farquhar, S. R. Smith, C. Van Dyck, R.L. McCreery, Large Capacity Enhancement of Carbon Electrodes by Solution Processing for High Density Energy Storage, *ACS Applied Materials and. Interfaces.* **2020**, *12*, 10211