

Curriculum vitae of Nicolas Leclerc

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Summary of career

2020-present: Directeur de recherche CNRS in Strasbourg, France
2005-2020: Chargé de recherche CNRS in Strasbourg, France.
2003-2005: Post-doctoral position in the group of Prof. **M. Leclerc**, Québec, Canada (Synthesis and characterization of π -conjugated oligomers and polymers for OFET, OLED and OPV applications).

Summary of education

June 2016: Habilitation à Diriger des Recherches, Université de Strasbourg (Dissertation autour de la relation structure/propriétés dans les matériaux semi-conducteurs organiques).
2000-2003: *Ph.D. in Polymer Chemistry* supervised by Prof. **A.J. Attias**, UPMC Paris 6, France (Modular synthesis of conjugated chromophores for optoelectronics. Study of their incorporation in polymers and the influence of architecture on photophysical properties).
1998-2000: *Master Degree in Polymer Chemistry* UPMC Paris 6, France.

Publications summary

86 publications, >2400 citations, h-index = 28, 1 patent, 1 book chapter.

Research area summary

π -conjugated molecular materials and polymers chemistry. Characterization of optoelectronic properties. Activities include studies of photovoltaic properties of synthesized materials.

Teaching summary

Organic semi-conducting materials (ECPM, Strasbourg, France) since 2009.

Selection of 5 recent publications

- 1) *Triazatruxene-diketopyrrolopyrrole Dumbbell-shaped molecules as Photoactive Electron Donor for High-Efficiency Solution Processed Organic Solar Cells*, T. Bura, N. Leclerc, R. Bechara, P. Lévêque, T. Heiser and R. Ziesel, *Advanced Energy Materials*, **2013**, 3, 1118-1124.
 - 2) *Peryleneimide-based donor-acceptor co-oligomers: impact of molecular architecture on self-assembling properties*, P.O. Schwartz, L. Biniek, E. Zaborova, B. Heinrich, M. Brinkmann, N. Leclerc and S. Méry, *Journal of the American Chemical Society*, **2014**, 136, 5981-5992.
 - 3) *Rational Engineering of BODIPY-bridged-Trisindole derivatives for Solar Cell Applications*, I. Bulut, Q. Huault, A. Mirloup, P. Chávez, S. Fall, A. Hébraud, S. Méry, B. Heinrich, T. Heiser, P. Lévêque and N. Leclerc, *ChemSusChem*, **2017**, 10, 1878-1882.
 - 4) *Face-on orientation of fluorinated polymers conveyed by long alkyl chains: a prerequisite for high photovoltaic efficiencies*, O. A. Ibraikulov, B. Heinrich, P. Chávez, I. Bulut, C. Ngov, O. Boyron, N. Brouckaert, S. Swaraj, K. L. Gerasimov, D. A. Ivanov, S. Mery, N. Leclerc, P. Lévêque and T. Heiser, *Journal of Materials Chemistry A*, **2018**, 6, 12038-12045.
 - 5) *Bringing conducting polymers to high order: towards conductivities beyond 10^5 S/cm and thermoelectric power factors of $2 \text{ mW}\cdot\text{m}^{-1}\cdot\text{K}^{-2}$* , V. Vijayakumar, Y. Zhong, V. Untilova, M. Bahri, L. Herrmann, L. Biniek, N. Leclerc, and M. Brinkmann, *Advanced Energy Materials*, **2019**, 1900266.
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