

Publication list

Impact of Marginal Exciton–Charge-Transfer-State Offset on Charge Generation and Recombination in Polymer:Fullerene Solar Cells – M.S. Vezie, M. Azzouzi, A.M. Telford, T.R. Hopper, A.B. Sieval, J.C. Hummelen, K. Fallon, H. Bronstein, T. Kirchartz, A.A. Bakulin, T.M. Clarke and J. Nelson – *ACS Energy Letters* **2019**, *4*, 2096–2103. DOI: [10.1021/acseenergylett.9b01368](https://doi.org/10.1021/acseenergylett.9b01368)

Characterization of Interfacial Structure in Polymer-Fullerene Bulk Heterojunctions via ^{13}C $\{^2\text{H}\}$ Rotational Echo Double Resonance NMR – R.C. Nieuwendaal, D.M. DeLongchamp, L.J. Richter, C.R. Snyder, R.L. Jones, S. Engmann, A. Herzing, M. Heeney, Z. Fei, A.B. Sieval, and J.C. Hummelen – *Physical Review Letters* **2018**, *121*, 026101. DOI: [10.1103/PhysRevLett.121.026101](https://doi.org/10.1103/PhysRevLett.121.026101)

Structure/property/processing relationships for organic solar cells (book chapter) – M. Dyson, R. Kroon, A.B. Sieval, M. Campoy-Quiles, C. Müller and N. Stingelin – *Chapter 6 in Nanostructured Materials for Type III Photovoltaics* (eds. M. Azad Malik and P. Skabara), **2017**. DOI: [10.1039/9781782626749-00182](https://doi.org/10.1039/9781782626749-00182)

Origin of fullerene-induced vitrification of fullerene:donor polymer photovoltaic blends and its impact on solar cell performance – P. Westacott, N.D. Treat, J. Martin, J.H. Bannock, J.C. de Mello, M. Chabinyk, A.B. Sieval, J.J. Michels and N. Stingelin – *Journal of Materials Chemistry A* **2017**, *5*, 2689–2700. DOI: [10.1039/C6TA08950J](https://doi.org/10.1039/C6TA08950J)

Purification and electronic characterisation of 18 isomers of the OPV-acceptor material bis[60]PCBM – W. Shi, X. Hou, T. Liu, Z. Zhao, A.B. Sieval, J.C. Hummelen and T.J.S. Dennis – *Chemical Communications* **2017**, *53*, 975–978. DOI: [10.1039/C6CC07820F](https://doi.org/10.1039/C6CC07820F)

Diels–Alder adducts of C₆₀ and esters of 3-(1-indenyl)-propionic acid: alternatives for [60]PCBM in polymer:fullerene solar cells – A.B. Sieval, N.D. Treat, D. Rozema, J.C. Hummelen and N. Stingelin – *Chemical Communications* **2015**, 51, 8126–8129. [DOI: 10.1039/C5CC01642H](https://doi.org/10.1039/C5CC01642H)

[70]PCBM and incompletely separated grades of methanofullerenes produce bulk heterojunctions with increased robustness for ultra-flexible and stretchable electronics – S. Savagatrup, D. Rodriguez, A.D. Printz, A.B. Sieval, J.C. Hummelen and D.J. Lipomi – *Chemistry of Materials* **2015**, 27, 3902–3911. DOI: [10.1021/acs.chemmater.5b00638](https://doi.org/10.1021/acs.chemmater.5b00638)

Fullerene-based acceptor materials (book chapter) – A.B. Sieval and J.C. Hummelen – *Chapter 7 in Organic Photovoltaics: Materials, device physics, and manufacturing technologies* (eds. C. Brabec, U. Scherf and V. Dyakonov), **2014**. DOI: [10.1002/9783527656912.ch07](https://doi.org/10.1002/9783527656912.ch07)

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Patents

Blends of fullerene derivatives, and uses thereof in electronic devices – D.F. Kronholm, J.C. Hummelen, A.B. Sieval and P. van 't Hof – Patent numbers: US 8076050; US 8435713; US 8945807; EP 2043952 B1; and JP 5568300.