

Publication list

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)

Mixed C60/C70 based fullerene acceptors in polymer bulk-heterojunction solar cells – L.M. Andersson, Y.-T. Hsu, K. Vandewal, A.B. Sieval, M.R. Andersson and O. Inganäs – *Organic Electronics* **2012**, 13, 2856–2864. DOI: [10.1016/j.orgel.2012.08.028](https://doi.org/10.1016/j.orgel.2012.08.028)

Electron trapping in higher adduct fullerene-based solar cells – M. Lenes, S.W. Shelton, A.B. Sieval, D.F. Kronholm, J.C. Hummelen and P.W.M Blom – *Advanced Functional Materials* **2009**, 19, 3002–3007. DOI: [10.1002/adfm.200900459](https://doi.org/10.1002/adfm.200900459)

Photovoltaic performance of an ultras-small band gap polymer – A.P. Zoombelt, M. Fonrodona, M.M. Wienk, A.B. Sieval, J.C. Hummelen and R.A.J. Janssen – *Organic Letters* **2009**, 11, 903–906. DOI: [10.1021/ol802839z](https://doi.org/10.1021/ol802839z)

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.