

## Refereed Journal Articles

### [Modelling the ionisation state of Type Ia supernovae in the nebular-phase](#)

**L. Shingles**, A. Flörs, S. A. Sim, C. E. Collins, F. K. Roepke, I. R. Seitenzahl, K. J. Shen  
*Monthly Notices of the Royal Astronomical Society*, Volume 512, Issue 4, pp.6150-6163 (2022).

### [The influence of line opacity treatment in STELLA on supernova light curves](#)

A. Kozyreva, **L. Shingles**, Alexey Mironov, Petr Baklanov, Sergey Blinnikov  
*Monthly Notices of the Royal Astronomical Society*, Volume 499, Issue 3, pp.4312-4324 (2020).

### [Monte Carlo radiative transfer for the nebular phase of Type Ia supernovae](#)

**L. Shingles**, S. A. Sim, M. Kromer, K. Maguire, M. Bulla, C. Collins, C. P. Ballance, A. S. Michel, C. A. Ramsbottom, F. K. Röpkke, I. R. Seitenzahl, N. B. Tyndall  
*Monthly Notices of the Royal Astronomical Society*, Volume 492, Issue 2, p.2029-2043 (2020).

### [A year-long plateau in the late-time near-infrared light curves of Type Ia supernovae](#)

Or Graur, Kate Maguire, Russell Ryan, Matt Nicholl, Arturo Avelino, Adam G. Riess, **Luke Shingles**, Ivo R. Seitenzahl, and Robert Fisher  
*Nature Astronomy*, Advanced Online Publication (2019).

### [Using late-time optical and near-infrared spectra to constrain Type Ia supernova explosion properties](#)

K. Maguire, S. A. Sim, **L. Shingles**, J. Spyromilio, A. Jerkstrand, M. Sullivan, T.-W. Chen, R. Cartier, G. Dimitriadis, C. Frohmaier, L. Galbany, C. P. Gutiérrez, G. Hosseinzadeh, D. A. Howell, C. Inserra, R. Rudy, J. Sollerman  
*Monthly Notices of the Royal Astronomical Society*, Volume 477, Issue 3, p.3567-3582 (2018).

### [A kilonova as the electromagnetic counterpart to a gravitational-wave source](#)

S. J. Smartt, T.-W. Chen, A. Jerkstrand, M. Coughlin, E. Kankare, S. A. Sim, M. Fraser, C. Inserra, K. Maguire, K. C. Chambers, M. E. Huber, T. Krühler, G. Leloudas, M. Magee, **L. J. Shingles**, and 107 additional authors  
*Nature*, Volume 551, Issue 7678, pp. 75-79 (2017)

### [Multi-messenger Observations of a Binary Neutron Star Merger](#)

Joint-authored by several collaborations including ePESSTO (including **L. J. Shingles**)  
*The Astrophysical Journal Letters*, Volume 848, Issue 2, article id. L12, 59 pp. (2017).

### [A chemical signature from fast-rotating low-metallicity massive stars: ROA 276 in omega Centauri](#)

David Yong, John E. Norris, Gary S. Da Costa, Laura M. Stanford, Amanda I. Karakas, **Luke J. Shingles**, Raphael Hirschi, Marco Pignatari  
*The Astrophysical Journal*, Volume 837, Issue 2, article id. 176, 8 pp. (2017).

### [Evolution and nucleosynthesis of helium-rich asymptotic giant branch models](#)

**Luke J. Shingles**, Carolyn L. Doherty, Amanda I. Karakas, Richard J. Stancliffe, John C. Lattanzio, Maria Lugaro  
*Monthly Notices of the Royal Astronomical Society*, Volume 452, Issue 3, p.2804-2821 (2015).

### [Iron and s-element abundance variations in NGC 5286: comparison with anomalous' globular clusters and Milky Way satellites](#)

A. F. Marino, A. P. Milone, A. I. Karakas, L. Casagrande, D. Yong, **L. Shingles**, G. Da Costa, J. Norris, P. B. Stetson, K. Lind, M. Asplund, R. Collet, H. Jerjen, L. Sbordone, A. Aparicio, & S. Cassisi  
*Monthly Notices of the Royal Astronomical Society*, Volume 450, Issue 1, p.815-845 (2015).

[The s-process enrichment of the globular clusters M4 and M22](#)

**Luke J. Shingles**, Amanda I. Karakas, Raphael Hirschi, Cherie K. Fishlock, David Yong, Gary S. Da Costa, & Anna F. Marino

*The Astrophysical Journal*, Volume 795, Issue 1, article id. 34, 12 pp. (2014).

[Iron and neutron-capture element abundance variations in the globular cluster M2 \(NGC 7089\)](#)

David Yong, Ian U. Roederer, Frank Grundahl, Gary S. Da Costa, Amanda I. Karakas, John E. Norris, Wako Aoki, Cherie K. Fishlock, A. F. Marino, A. P. Milone, & **Luke J. Shingles**

*Monthly Notices of the Royal Astronomical Society*, Volume 441, Issue 4, p.3396-3416 (2014).

[Augmented reality in astrophysics](#)

Frédéric Vogt & **Luke J. Shingles**

*Astrophysics and Space Science*, Volume 347, Issue 1, pp.47-60 (2013).

[Is the sulphur anomaly in planetary nebulae caused by the s-process?](#)

**Luke J. Shingles** & Amanda I. Karakas

*Monthly Notices of the Royal Astronomical Society*, Volume 431, Issue 3, p.2861-2871 (2013).