Selected Refereed Journal Articles

Self-consistent 3D Radiative Transfer for Kilonovae: Directional Spectra from Merger Simulations
L. Shingles, Collins C. E., Vijayan V., Flörs A., Just O., Leck G., Xiong Z., et al.,
ApJL, 954, L4 (2023).

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
MNRAS, Volume 512, Issue 4, pp.6150-6163 (2022).

Release of the ATLAS Forced Photometry server for public use
L. Shingles, Smith K. W., Young D. R., Smartt S. J., Tonry J., Denneau L., Heinze A., et al.
TNSAN, 7 (2021). Smartt S. J., Tonry J., Denneau L., Heinze A., et al., 2021, TNSAN, 7

The influence of line opacity treatment in STELLA on supernova light curves
A. Kozyreva, **L. Shingles**, Alexey Mironov, Petr Baklanov, Sergey Blinnikov
MNRAS, 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. Röpke, I. R. Seitenzahl, N. B. Tyndall
MNRAS, 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
MNRAS, 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
MNRAS, 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
MNRAS, 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**
MNRAS, 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
MNRAS, Volume 431, Issue 3, p.2861-2871 (2013).