

Zarija LukiÄ

List of Publications by Year in descending order

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Version: 2024-02-01

49
papers

2,941
citations

201674

27
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254184

43
g-index

49
all docs

49
docs citations

49
times ranked

2546
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Halo es gone MAD...: The Halo-Finder Comparison Project. Monthly Notices of the Royal Astronomical Society, 2011, 415, 2293-2318. | 4.4 | 302 |
| 2 | Quantitative Constraints on the Reionization History from the IGM Damping Wing Signature in Two Quasars at $z \approx 7$. Astrophysical Journal, 2018, 864, 142. | 4.5 | 197 |
| 3 | Nyx: A MASSIVELY PARALLEL AMR CODE FOR COMPUTATIONAL COSMOLOGY. Astrophysical Journal, 2013, 765, 39. | 4.5 | 192 |
| 4 | The Halo Mass Function: High-Redshift Evolution and Universality. Astrophysical Journal, 2007, 671, 1160-1181. | 4.5 | 184 |
| 5 | HACC: Simulating sky surveys on state-of-the-art supercomputing architectures. New Astronomy, 2016, 42, 49-65. | 1.8 | 166 |
| 6 | MASS FUNCTION PREDICTIONS BEYOND Λ CDM. Astrophysical Journal, 2011, 732, 122. | 4.5 | 164 |
| 7 | Structure finding in cosmological simulations: the state of affairs. Monthly Notices of the Royal Astronomical Society, 2013, 435, 1618-1658. | 4.4 | 138 |
| 8 | The Lyman τ forest in optically thin hydrodynamical simulations. Monthly Notices of the Royal Astronomical Society, 2015, 446, 3697-3724. | 4.4 | 133 |
| 9 | Implications of $z \approx 4$ Quasar Proximity Zones for the Epoch of Reionization and Quasar Lifetimes. Astrophysical Journal, 2017, 840, 24. | 4.5 | 122 |
| 10 | New Constraints on IGM Thermal Evolution from the Ly τ Forest Power Spectrum. Astrophysical Journal, 2019, 872, 13. | 4.5 | 109 |
| 11 | The cosmic code comparison project. Computational Science & Discovery, 2008, 1, 015003. | 1.5 | 99 |
| 12 | Self-consistent Modeling of Reionization in Cosmological Hydrodynamical Simulations. Astrophysical Journal, 2017, 837, 106. | 4.5 | 85 |
| 13 | THE STRUCTURE OF HALOS: IMPLICATIONS FOR GROUP AND CLUSTER COSMOLOGY. Astrophysical Journal, 2009, 692, 217-228. | 4.5 | 82 |
| 14 | Cosmic Ray Radiography of the Damaged Cores of the Fukushima Reactors. Physical Review Letters, 2012, 109, 152501. | 7.8 | 63 |
| 15 | A New Measurement of the Temperature-density Relation of the IGM from Voigt Profile Fitting. Astrophysical Journal, 2018, 865, 42. | 4.5 | 62 |
| 16 | Imaging Fukushima Daiichi reactors with muons. AIP Advances, 2013, 3, . | 1.3 | 59 |
| 17 | Performance Analysis, Design Considerations, and Applications of Extreme-Scale In Situ Infrastructures. , 2016, , . | | 51 |
| 18 | HACC. Communications of the ACM, 2016, 60, 97-104. | 4.5 | 51 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | PARTICLE MESH SIMULATIONS OF THE Ly $\hat{\pm}$ FOREST AND THE SIGNATURE OF BARYON ACOUSTIC OSCILLATIONS IN THE INTERGALACTIC MEDIUM. <i>Astrophysical Journal</i> , 2010, 713, 383-393. | 4.5 | 46 |
| 20 | Capturing Halos at High Redshifts. <i>Astrophysical Journal</i> , 2006, 642, L85-L88. | 4.5 | 42 |
| 21 | A New Method to Measure the Post-reionization Ionizing Background from the Joint Distribution of Ly $\hat{\pm}$ and Ly $\hat{2}$ Forest Transmission ^{<sup>â—</sup>. <i>Astrophysical Journal</i>, 2018, 855, 106.} | 4.5 | 42 |
| 22 | Imaging a nuclear reactor using cosmic ray muons. <i>Journal of Applied Physics</i> , 2013, 113, . | 2.5 | 39 |
| 23 | Measurement of the small-scale structure of the intergalactic medium using close quasar pairs. <i>Science</i> , 2017, 356, 418-422. | 12.6 | 39 |
| 24 | BD-CATS. , 2015, , . | | 38 |
| 25 | Hybrid petacomputing meets cosmology: The Roadrunner Universe project. <i>Journal of Physics: Conference Series</i> , 2009, 180, 012019. | 0.4 | 33 |
| 26 | Detection of z $\hat{\wedge}^{1/4}\hat{\wedge}^{2.3}$ Cosmic Voids from 3D Ly $\hat{\pm}$ Forest Tomography in the COSMOS Field. <i>Astrophysical Journal</i> , 2018, 861, 60. | 4.5 | 31 |
| 27 | The power spectrum of the Lyman- $\hat{\pm}$ Forest at z < 0.5. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 769-782. | 4.4 | 30 |
| 28 | Self-supervised Representation Learning for Astronomical Images. <i>Astrophysical Journal Letters</i> , 2021, 911, L33. | 8.3 | 29 |
| 29 | The Universe at extreme scale: Multi-petaflop sky simulation on the BG/Q. , 2012, , . | | 28 |
| 30 | Obtaining material identification with cosmic ray radiography. <i>AIP Advances</i> , 2012, 2, . | 1.3 | 27 |
| 31 | MODELING THE Ly $\hat{\pm}$ FOREST IN COLLISIONLESS SIMULATIONS. <i>Astrophysical Journal</i> , 2016, 827, 97. | 4.5 | 27 |
| 32 | In situ and in-transit analysis of cosmological simulations. <i>Computational Astrophysics and Cosmology</i> , 2016, 3, 4. | 22.7 | 24 |
| 33 | Modeling the He ii Transverse Proximity Effect: Constraints on Quasar Lifetime and Obscuration. <i>Astrophysical Journal</i> , 2018, 861, 122. | 4.5 | 23 |
| 34 | The Accelerated Universe. <i>Computing in Science and Engineering</i> , 2010, 12, 17-25. | 1.2 | 21 |
| 35 | A Fundamental Test for Galaxy Formation Models: Matching the Lyman- $\hat{\pm}$ Absorption Profiles of Galactic Halos Over Three Decades in Distance. <i>Astrophysical Journal</i> , 2018, 859, 125. | 4.5 | 20 |
| 36 | GALAXY CLUSTERS AS A PROBE OF EARLY DARK ENERGY. <i>Astrophysical Journal</i> , 2011, 727, 87. | 4.5 | 18 |

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|----|---|-----|-----------|
| 37 | DESCQA: An Automated Validation Framework for Synthetic Sky Catalogs. <i>Astrophysical Journal, Supplement Series</i> , 2018, 234, 36. | 7.7 | 18 |
| 38 | Simulating intergalactic gas for DESI-like small scale Lyman α forest observations. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 059. | 5.4 | 18 |
| 39 | Mapping Quasar Light Echoes in 3D with Ly α Forest Tomography. <i>Astrophysical Journal</i> , 2019, 882, 165. | 4.5 | 17 |
| 40 | Master of Puppets. , 2016, , . | | 13 |
| 41 | Mining for Strong Gravitational Lenses with Self-supervised Learning. <i>Astrophysical Journal</i> , 2022, 932, 107. | 4.5 | 13 |
| 42 | Measuring Alignments between Galaxies and the Cosmic Web at $z \sim 3$ Using IGM Tomography. <i>Astrophysical Journal</i> , 2017, 837, 31. | 4.5 | 12 |
| 43 | Cosmic Inference: Constraining Parameters with Observations and a Highly Limited Number of Simulations. <i>Astrophysical Journal</i> , 2021, 906, 74. | 4.5 | 10 |
| 44 | Tuning Object-Centric Data Management Systems for Large Scale Scientific Applications. , 2019, , . | | 6 |
| 45 | Nyx: A Massively Parallel AMR Code for Computational Cosmology. <i>Journal of Open Source Software</i> , 2021, 6, 3068. | 4.6 | 6 |
| 46 | Improving IGM temperature constraints using wavelet analysis on high-redshift quasars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 508, 5493-5513. | 4.4 | 5 |
| 47 | Fast, High-fidelity Ly α Forests with Convolutional Neural Networks. <i>Astrophysical Journal</i> , 2022, 929, 160. | 4.5 | 5 |
| 48 | Programmable In Situ System for Iterative Workflows. <i>Lecture Notes in Computer Science</i> , 2018, , 122-131. | 1.3 | 2 |
| 49 | Statistical Detection of the He II Transverse Proximity Effect: Evidence for Sustained Quasar Activity for >25 Million Years. <i>Frontiers in Astronomy and Space Sciences</i> , 2017, 4, . | 2.8 | 0 |