基于 ESI 数据库分领域热点论文简报 XⅦ

ESI 是基于汤森路透 Web of Science（SCIE/SSCI）所收录的全球 12000 多种学术期刊的 1200 多万条文献记录而建立的计量分析数据库。ESI 针对 22 个专业领域，通过论文数、论文被引频次、论文篇均被引频次、高影响论文（高被引论文和热点论文排重后的简单和）指标，成为当今世界范围内普遍用以评价高校、学术机构、国家/地区国际学术水平及影响力的重要评价指标工具之一。该数据库基于 10 年内文献数据进行综合分析评价，每两月更新一次。

热点论文：ESI 数据库统计筛选出在过去两年内发表，且在近两月内，被引用的次数进入其学术领域前 0.1%的论文。

细分领域：根据 WoS 数据库的领域划分选取了高能所发文比较集中的四个细分领域，“Physics, Particles & Fields”、“Physics, Nuclear”、“Astronomy & Astrophysics ”和“Materials Science, Multidisciplinary”。

目录

本次简报基于 ESI 于 2023 年 9 月 15 日更新的数据，热点论文统计范围为 2021 年 7 月-2023 年 6 月发表的论文，且在 2023 年 5-6 月被引用次数进入该领域前 0.1%的论文。

论文前的黑圈数字（如❷）表示该论文在最近 12 期热点论文简报中重复出现的次数

“Physics, Particles & Fields”热点论文 8 篇

1. ⓫ In the realm of the Hubble tension-a review of solutions *. Di Valentino, E, Mena, O, Pan, S et al. CLASSICAL AND QUANTUM GRAVITY, 38 (2021) 153001. Cited: 573. http://dx.doi.org/10.1088/1361-6382/ac086d
2. ❽ Dark Energy Survey Year 3 results: Cosmological constraints from galaxy clustering and weak lensing. Abbott, TMC, Aguena, M, Alarcon, A et al. PHYSICAL REVIEW D, 105 (2022) 23520. Cited: 110. http://dx.doi.org/10.1103/PhysRevD.105.023520
3. ❸ Scalar Induced Gravitational Waves Review. Domenech, G UNIVERSE, 7 (2021) 398. Cited: 108. http://dx.doi.org/10.3390/universe7110398
4. ❺ REVIEW OF PARTICLE PHYSICS. Workman, RL, Burkert, VD, Crede, V et al. PROGRESS OF THEORETICAL AND EXPERIMENTAL PHYSICS, 2022 (2022) 083C01. Cited: 97. http://dx.doi.org/10.1093/ptep/ptac097
5. ❷ FLAG Review 2021. Aoki, Y, Blum, T, Colangelo, G et al. EUROPEAN PHYSICAL JOURNAL C, 82 (2022) 869. Cited: 46. http://dx.doi.org/10.1140/epjc/s10052-022-10536-1
6. ❸ New horizons for fundamental physics with LISA. Arun, KG, Belgacem, E, Benkel, R et al. LIVING REVIEWS IN RELATIVITY, 25 (2022) 4. Cited: 39. http://dx.doi.org/10.1007/s41114-022-00036-9
7. Astrophysics with the Laser Interferometer Space Antenna. Amaro-Seoane, P, Andrews, J, Sedda, MA et al. LIVING REVIEWS IN RELATIVITY, 26 (2023) 2. Cited: 32. http://dx.doi.org/10.1007/s41114-022-00041-y
8. Alleviating both H-0 and S-8 tensions: Early dark energy lifts the CMB-lockdown on ultralight axion. Ye, G, Zhang, J, Piao, YS et al. PHYSICS LETTERS B, 839 (2023) 137770. Cited: 8. http://dx.doi.org/10.1016/j.physletb.2023.1377700370-2693

“Physics, Nuclear”热点论文 2 篇

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2. Alleviating both H-0 and S-8 tensions: Early dark energy lifts the CMB-lockdown on ultralight axion. Ye, G, Zhang, J, Piao, YS et al. PHYSICS LETTERS B, 839 (2023) 137770. Cited: 8.http://dx.doi.org/10.1016/j.physletb.2023.1377700370-2693

“Astronomy & Astrophysics”热点论文 35 篇

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2. ❿A NICER View of the Massive Pulsar PSR J0740+6620 Informed by Radio Timing and XMM-Newton Spectroscopy. Riley, TE, Watts, AL, Ray, PS et al. ASTROPHYSICAL JOURNAL LETTERS, 918 (2021) L27. Cited: 326. http://dx.doi.org/10.3847/2041-8213/ac0a81
3. ❿The Radius of PSR J0740+6620 from NICER and XMM-Newton Data. Miller, MC, Lamb, FK, Dittmann, AJ et al. ASTROPHYSICAL JOURNAL LETTERS, 918 (2021) L28. Cited: 302. http://dx.doi.org/10.3847/2041-8213/ac089b
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5. ❻First Sagittarius A* Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole in the Center of the Milky Way. Akiyama, K, Alberdi, A, Alef, W et al. ASTROPHYSICAL JOURNAL LETTERS, 930 (2022) L12. Cited: 248. http://dx.doi.org/10.3847/2041-8213/ac6674
6. ❸The Astropy Project: Sustaining and Growing a Community-oriented Open-source Project and the Latest Major Release (v5.0) of the Core Package*. Price-Whelan, AM, Lim, PL, Earl, N et al. ASTROPHYSICAL JOURNAL, 935 (2022) 167. Cited: 247. http://dx.doi.org/10.3847/1538-4357/ac7c74
7. ❻The Seventeenth Data Release of the Sloan Digital Sky Surveys: Complete Release of MaNGA, MaStar, and APOGEE-2 Data. Abdurro'uf, Accetta, K, Aerts, C et al. ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES, 259 (2022) 35. Cited: 184. http://dx.doi.org/10.3847/1538-4365/ac4414
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9. ❹Cosmology intertwined: A review of the particle physics, astrophysics, and cosmology associated with the cosmological tensions and anomalies. Abdalla, E, Abellan, GF, Aboubrahim, A et al. JOURNAL OF HIGH ENERGY ASTROPHYSICS, 34 (2022) . Cited: 154. http://dx.doi.org/10.1016/j.jheap.2022.04.002

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“Materials Science, Multidisciplinary”热点论文 347 篇

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