

Publication List – Anna Frebel

Papers Published in Refereed Journals

First author of 7 refereed publications

Main author and co-author of a total of 13 refereed publications

Citation index (h-index): 9

2008

13. Kirby, E. N., Simon, J. D., Geha, M., Guhathakurta, P. and **Frebel, A.** 2008, **ApJ**, in press
“*Uncovering Extremely Metal-Poor Stars in the Milky Way’s Ultra-Faint Dwarf Spheroidal Satellite Galaxies*”
12. **Frebel, A.**, Collet, R., Eriksson, K., Christlieb, N. and Aoki, W. 2008, **ApJ** 684, 588
“*HE 1327–2326: An unevolved star with $[Fe/H] < -5.0$. II. New 3D-1D corrected abundances from a VLT/UVES spectrum*”
11. Roederer I., **Frebel, A.**, Shetrone, M., Allende Prieto, C., Rhee, J., Gallino, R., Bisterzo, S., Sneden, C., Beers, T. C. and Cowan, J. J., 2008, **ApJ** 679, 1549
“*The Hobby-Eberly Telescope Chemical Abundances of Stars in the Halo (CASH) Project. I. The Lithium-, r-, and s-Enhanced Metal-Poor Giant HKIII7435-00532*”
10. Christlieb, N., Schörck, T., **Frebel, A.**, Beers, T. C., Wisotzki, L. and Reimers, D. 2008, **A&A** 484, 721
“*The stellar content of the Hamburg/ESO survey. IV. Selection of candidate metal-poor stars*”

2007

9. **Frebel, A.**, Johnson, J. L. and Bromm, V. 2007, **MNRAS** 380, L40
“*Probing the Formation of the First Low-Mass Stars with Stellar Archaeology*”
8. **Frebel, A.**, Christlieb, N., Norris, J. E., Thom, C., Beers, T. C. and Rhee, J. 2007, **ApJ** 660, L117
“*Discovery of HE 1523-0901, a Strongly r-Process Enhanced Metal-Poor Star with Detected Uranium*”
7. **Frebel, A.**, Norris, J. E., Aoki, W., Honda, S., Bessell, M. S., Takada-Hidai, M., Beers, T. C. and Christlieb, N. 2007, **ApJ** 658, 534
“*Chemical Abundance Analysis of the Extremely Metal-Poor Star HE 1300+0157*”
6. Beers, T. C., Flynn, C., Rossi, S., Sommer-Larsen, J., Wilhelm, R., Marsteller, B., Lee, Y., De Lee, N., Krugler, J., Deliyannis, C. P., Zickgraf, F. J., Holmberg, J., Oehag, A., Eriksson, A., Terndrup, D. M., Salim, S., Andersen, J., Nordstrom, B., Christlieb, N. and **Frebel, A.** 2007, **ApJS** 168, 128
“*Broadband UBVRI Photometry of Horizontal-Branch and Metal-Poor Candidates from the HK and Hamburg/ESO Surveys. I*”

2006

5. **Frebel, A.**, Christlieb, N., Norris, J. E., Beers, T. C., Bessell, M. S., Rhee, J., Fechner, C., Marsteller, B., Rossi, S., Thom, C., Wisotzki, L. and Reimers, D., 2006, **ApJ** 652, 1585
“*Bright Metal-Poor Stars from the Hamburg/ESO Survey. I. Selection and Follow-up Observations from 329 Fields*”
4. **Frebel, A.**, Christlieb, N., Norris, J.E., Aoki, W. and Asplund, M. 2006, **ApJ** 638L, 17
“*The Oxygen Abundance of HE 1327-2326*”

2005

3. Aoki, W., **Frebel, A.**, Christlieb, N., Norris, J. E., Beers, T. C., Minezaki, T., Barklem, P. S., Honda, S., Takada-Hidai, M., Asplund, M., Ryan, S. G., Tsangarides, S., Eriksson, K., Steinhauer, A., Deliyannis, C., Nomoto, K., Fujimoto, M. Y., Ando, H., Yoshii, Y., Kajino, T. 2005, **ApJ** 639, 897
“*HE 1327–2326: An unevolved star with $[Fe/H] < -5.0$. I. A comprehensive abundance analysis*”
2. **Frebel, A.**, Aoki, W., Christlieb, N., Ando, H., Asplund, M., Barklem, P. S., Beers, T. C., Eriksson, K., Fechner, C., Fujimoto, M. Y., Honda, S., Kajino, T., Minezaki, T., Nomoto, K., Norris, J. E., Ryan, S. G., Takada-Hidai, M., Tsangarides, S., Yoshii, Y., 2005, **Nature** 434, 871
“*Nucleosynthetic signatures of the first stars*”

2004

1. Lipkin, Y. M., Ofek, E. O., Gal-Yam, A., Leibowitz, E. M., Poznanski, D., Kaspi, S., Polishook, D., Kulkarni, S. R., Fox, D. W., Berger, E., Mirabal, N., Halpern, J., Bureau, M., Fathi, K., Price, P. A., Peterson, B. A., **Frebel, A.**, Schmidt, B., Orosz, J. A., Fitzgerald, J. B., Bloom, J. S., van Dokkum, P. G., Baily, C. D., Buxton, M. M., Barsony, M. et al. 2004, **ApJ** 606, 381
“*The Detailed Optical Light Curve of GRB 030329*”

Papers Published in Non-Refereed Journals**2008**

15. **Frebel, A.** 2008, invited talk, Proceedings of the Intl. Symposium on Nuclear Astrophysics, Nuclei in the Cosmos X 2008, PoS, submitted
“*Observing the r-process signature in the oldest Galactic stars*”
14. **Frebel, A.** 2008, invited talk, A Stellar Journey, Physica Scripta, IOP, submitted
“*Constraints on the Chemical Yields of the First Stars*”
13. **Frebel, A.**, Johnson, J. L. and Bromm, V. 2008, proceedings IAU Symposium 255, CUP, submitted
“*Stellar Archaeology: Using metal-poor stars to test theories of the early Universe*”

12. **Frebel, A.** 2008, invited review, New Horizons in Astronomy: Frank N. Bash Symposium 2007, ASP Conf. Series, 393, 63
“Metal-Poor Stars”
11. **Frebel, A.**, Allende Prieto, C., Roederer, I. U., Shetrone, M., Rhee, J., Sneden, C., Beers, T. C., Cowan, J. J. 2008 New Horizons in Astronomy: Frank N. Bash Symposium 2007, ASP Conf. Series, 393, 203
“The Hobby-Eberly Telescope Chemical Abundances of Stars in the Halo CASH Project I. Observations of the First Year”
10. **Frebel, A.**, Roederer, I. U., Shetrone, M., Allende Prieto, C., Rhee, J., Gallino, R., Bisterzo, S., Sneden, C., Beers, T. C., Cowan, J. J. 2008 New Horizons in Astronomy: Frank N. Bash Symposium 2007, ASP Conf. Series, 393, 207
“The Hobby-Eberly Telescope Chemical Abundances of Stars in the Halo CASH Project II. The Li-, r- and s-Enhanced Metal-Poor Giant ligiant”
9. Davies, L. A., **Frebel, A.**, Cowan, J. J., Allende Prieto, C., Sneden, C. 2008 New Horizons in Astronomy: Frank N. Bash Symposium 2007, ASP Conf. Series, 393, 187
“The Hobby-Eberly Telescope Chemical Abundances of Stars in the Halo (CASH) Project III. Abundance Analysis of Three Bright Hamburg/ESO Survey Stars”
8. Roederer, I. U., **Frebel, A.**, Shetrone, M., Allende Prieto, C. Rhee, J., Gallino, R., Bisterzo, S., Sneden, C., Beers, T. C., Cowan, J. J. 2008 IXth Torino workshop on evolution and nucleosynthesis in AGB stars & IInd Perugia workshop on nuclear astrophysics, AIP Conf. Proceedings 1001, 169
“The Lithium-, r- and s-Enhanced Metal-Poor Giant HK-II 17435-00532”
7. **Frebel, A.**, Beers, T. C. and Marsteller, B. 2008, First Stars III, AIP Conf. Proceedings 990, 113
“New Results from the Bright Metal-Poor Stars in the Hamburg/ESO Survey”
6. Korn, A., Mashonkina, L., Richard, O., **Frebel, A.**, Aoki, W., Christlieb, N. 2008, First Stars III, AIP Conf. Proceedings 990, 167
“HE 1327–2326: stellar parameters, atomic diffusion and Li abundance”
5. Krugler, J. A., Beers, T. C., Lee, Y. S., Sivarani, T., Marsteller, B., Wilhelm, R., Prieto, C. Allende, **Frebel, A.**, Norris, J. E., Johnson, J., et al. 2008, First Stars III, AIP Conf. Proceedings 990, 151
“Revised Parameter Estimates For The Most Metal-Poor Candidates In SDSS-I And SEGUE 990, 151”

2006

4. Aoki, W., **Frebel, A.**, Christlieb N. et al. 2006, AIP Conf. Proceedings, OMEG05, 847, 53
“An abundance study of the most iron-poor star HE1327-2326 with Subaru/HDS”
3. Aoki, W., Beers, T. C., Christlieb, N., **Frebel, A.**, Norris, J. E., Honda, S., Takada-Hidai, M., Asplund, M., Ando, H., Ryan, S. G., Tsangarides, S. 2006, Proceedings of the Intl. Symposium on Nuclear Astrophysics, Nuclei in the Cosmos IX 2006
“Chemical abundance patterns of extremely metal-poor stars”

2005

2. **Frebel, A.**, Aoki, W., Christlieb, N. et al. 2005, proceedings IAU Symposium 228, 207
“*The new record for the most iron-poor star: HE 1327–2326, a dwarf or subgiant with $[Fe/H] = -5.4$* ”
1. Aoki, W., Beers, T.C., Christlieb, N., **Frebel, A.**, et al. 2005, proceedings IAU Symposium 228, 195
“*Chemical Abundance Patterns of Extremely Metal-Poor Stars with $[Fe/H] < -3.5$* ”

Articles Published in Popular Science Journals**2008**

1. **Frebel, A.** 2008 Spectrum der Wissenschaft (German equiv. of Scientific American), 09/2008, 24-39
“*Auf der Spur der Sternreise*” (*Hunting for the Oldest Stars*)