

PUBLICATIONS AND PREPRINTS

- [1] **Bin Zhou** and Xiaohua Zhu, Relative K-stability and modified K-energy on toric manifolds, *Advances in Mathematics* 219(2008), 1327-1362.
- [2] **Bin Zhou** and Xiaohua Zhu, K-stability on toric manifolds, *Proceedings of American Mathematical Society* 136(2008), 3301-3307.
- [3] **Bin Zhou** and Xiaohua Zhu, Minimizing weak solutions for Calabi's extremal metrics on toric manifolds, *Calculus of Variations and PDE* 32(2008), 191-217.
- [4] Xu-jia Wang and **Bin Zhou**, On the existence and nonexistence of extremal metrics on toric Kähler surfaces, *Advances in Mathematics* 226(2011), 4429-4455.
- [5] **Bin Zhou**, The Bernstein theorem for a class of fourth order equations, *Calculus of Variations and PDE* 43(2012), 25-44.
- [6] **Bin Zhou**, The first boundary value problem for Abreu's equation, *International Mathematics Research Notice*, 7(2012), 1439-1484. doi: 10.1093/imrn/rnr076.
- [7] Xu-jia Wang and **Bin Zhou**, Variational problems of Monge-Ampère type, in *Fifth International Congress of Chinese Mathematicians Part 1, AMS/IP Studies in Advanced Mathematics*, Vol. 51, Amer. math. Soc., Providence, RI, 2012, 383-296.
- [8] **Bin Zhou**, Sobolev inequality for complex Hessian equations, *Mathematische Zeitschrift*, 274(2013), 1306-1325.
- [9] Jiakun liu and **Bin Zhou**, An obstacle problem for Monge-Ampère typed functionals, *Journal of Differential Equations* 254(2013), 1306-1325.
- [10] **Bin Zhou**, Extremal metrics on toric manifolds—existence and K-stability (in Chinese), *Science Sinica Mathematics*, 44(2014), 1-11, doi:10.1360/012013-144.
- [11] Xu-jia Wang and **Bin Zhou**, K-stabilty and canonical metrics on toric manifolds, *Bulletin of the Institute of Mathematics Academia Sinica(New Series)*, 9(2014), 85-110.
- [12] Qiuyi Dai, Xu-jia Wang and **Bin Zhou**, The signed mean curvature measure, *Contemporary Mathematics*, Volume 644(2015) <http://dx.doi.org/10.1090/conm/644/12776> .
- [13] Qiuyi Dai, Xu-jia Wang and **Bin Zhou**, A potential theory for the k-curvature equation, *Advances in Mathematics*, 288(2016), 791-824.
- [14] Feng Wang, **Bin Zhou** and Xiaohua Zhu, Modified Futaki invariant and equivariant Riemann-Roch formula, *Advances in Mathematics*, 289(2016), 1205-1235.
- [15] **Bin Zhou**, Variational solutions to extremal metrics on toric surfaces, *Mathematische Zeitschrift*, 283(2016), 1011-1031.
- [16] Naoto Yotsutani, **Bin Zhou**, Relative Algebro-Geometric stabilities of Toric manifolds, *Tohoku Mathematical Journal*, Tohoku Math. J. (2) 71 (2019), no. 4, 495-524.
- [17] Yan Li, **Bin Zhou** and Xiaohua Zhu, K-energy on polarized group compactifications of Lie groups, arXiv:1701.00306.

[18] Jianchun Chu, **Bin Zhou**, Optimal regularity of plurisubharmonic envelopes on compact Hermitian manifolds, *accepted by Science China Mathematics*.

[19] Yan Li, **Bin Zhou**, Mabuchi metrics and properness of modified Ding functional, *Pacific Journal of Mathematics* 302(2019), 659-692.

[20] Xu-Jia Wang, Jiaxiang Wang and **Bin Zhou**, Moser-Trudinger inequality for the complex Monge-Ampère equation, *Journal of Functional Analysis* 279 (2020) 108765.

[21] Xu-Jia Wang, Jiaxiang Wang and **Bin Zhou**, A priori estimates for the complex Monge-Ampère equation, *Peking Mathematical Journal* (2021) 4:143-157.

[22] Shibing Chen, Xu-Jia Wang and **Bin Zhou**, On the four vertex theorem for curves on locally convex surfaces, *Mathematical Research Letters* 27(2020), no. 5, 1261-1279.

[23] Jiaxiang Wang and **Bin Zhou**, Monotonicity Formulae for the Complex Hessian Equations, to appear in *Methods and Applications of Analysis*.

[24] Jiaxiang Wang and **Bin Zhou**, Regularity for a class of singular complex Hessian equations, to appear in *Acta Mathematica Sinica*.

[25] Liding Huang and **Bin Zhou**, Green's function for equations with conic metrics, accepted by *Calculus of Variations and PDE*.

[26] Nam Quang Le and **Bin Zhou**, Solvability of a class of singular fourth order equations of Monge-Ampère type, *Annals of PDE* 7 (2021), no. 2, Paper No. 13.