1. **Peridynamic modeling of hydrogen-assisted white etching cracks in bearing steel under rolling contact fatigue** (*Open Access*)

Wang, Lanwen (Department of Mechanical Engineering, Tsinghua University, Beijing; 100084, China); Sheng, Xuanyu; Yao, Zhimeng; Luo, Jianbin **Source:** *International Journal of Fatigue*, v 173, August 2023
Open Access type(s): All Open Access, Hybrid Gold
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

2. **Influence of MnS inclusion characteristics on generation of white etching cracks in 100Cr6 bearing steel**

Kiranbabu, Srikakulapu (Max-Planck-Institut für Eisenforschung GmbH, Düsseldorf; 40237, Germany); Morsdorf, Lutz; Gonzalez, Ivan; Kölling, Michael; Broß, Christian; Ponge, Dirk; Herbig, Michael; Mayweg, David **Source:** *Wear*, v 534-535, December 15, 2023
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

3. **The Formation of White Etching Cracks Under Various Conditions in an Electrical Environment =**

Zurcher, Manuel (Friedrich-Alexander-Universitaet Erlangen-Nuernberg (Germany)) **Source:** *ProQuest Dissertations and Theses Global*, 2024
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

4. **White etching area damage induced by shear localization in rolling contact fatigue of bearing steel**

Chen, Jin-Hua (School of Mechanical Engineering and Mechanics, Key Laboratory of Impact and Safety Engineering of Ministry of Education Ningbo University, Ningbo, China); Xie, Chao; Li, Shu-Xin; Lu, Si-Yuan **Source:** *Fatigue and Fracture of Engineering Materials and Structures*, v 47, n 1, p 170-186, January 2024
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

5. **Influence of additive-derived reaction layers on white etching crack failure of SAE 52100 bearing steel under rolling contact loading**

Steinweg, Florian (Institute for Materials Applications in Mechanical Engineering, RWTH Aachen University, Augustinerbach 4, Aachen; 52062, Germany); Mikitisin, Adrian; Janitzky, Thomas L.M.; Richter, Silvia; Weirich, Thomas E.; Mayer, Joachim; Broeckmann, Christoph **Source:** *Tribology International*, v 180, February 2023
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

6. **Microstructure characteristics and formation mechanisms of white etching layer (WEL) and brown etching layer (BEL) on martensite bearing raceway** (*Open Access*)

Zhang, Xiaochen (School of Materials Science and Engineering, University of Science and Technology of China, 72 Wenhua Road, Shenyang; 110016, China); Wu, Di; Xia, Zhuofan; Zhang, Yaming; Li, Yifeng; Wang, Jianqiu; Han, En-Hou **Source:** *Journal of Materials Research and Technology*, v 25, p 4876-4887, July 1, 2023
Open Access type(s): All Open Access, Gold
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

7. Simulation study of Rayleigh wave inspection of subsurface white etching crack in bearing rollers (*Open Access*)

Wu, Chenchen (School of Mechatronic and Automation Engineering, Shanghai University, Shanghai; 200444, China); Zhu, Qi; Su, Zhan; Xu, Duo; Zhang, Haiyan **Source:** *Journal of Physics: Conference Series*, v 2822, n 1, 2024
Open Access type(s): All Open Access, Gold
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

8. Angular contact ball bearing skidding mechanism analysis and diagnosis considering flexible rotor characteristics

Ma, Leiming (College of Automation Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing; 210016, China); Jiang, Bin; Lu, Ningyun; Xiao, Lingfei; Guo, Qintao **Source:** *Mechanical Systems and Signal Processing*, v 207, January 15, 2024
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

9. Multiscale modelling and simulation of subsurface carbide deformation during the formation of white etching areas

Peela, Agastya (Institute for Materials Applications in Mechanical Engineering (IWM), RWTH Aachen University, Augustinerbach 4, Aachen; 52062, Germany); Spille, Joshua; Steinweg, Florian; Janitzky, Thomas; Schwedt, Alexander; Mayer, Joachim; Broeckmann, Christoph **Source:** *Wear*, v 512-513, January 15, 2023
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

10. Investigation on skidding behavior of a lubricated rolling bearing with fluid–solid-heat coupling effect

Liu, Yuqing (State Key Laboratory of Rail Transit Vehicle System, Southwest Jiaotong University, Chengdu; 610031, China); Chen, Zaigang; Zhai, Wanming; Lei, Yaguo **Source:** *Mechanical Systems and Signal Processing*, v 206, January 1, 2024
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

11. Investigation on Skidding Characteristics and Dynamic Responses of Rolling Element Bearing Under Thermal Elastohyrodynamic Lubrication

Kang, Jianxiong (Lanzhou University of Technology, School of Mechanical & Electrical Engineering, Lanzhou; 730050, China); Luo, Wei; Yan, Changfeng; Liu, Yaofeng; Lü, Yanjun; Wu, Lixiao **Source:** *SSRN*, November 8, 2023
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

12. Study of Skidding and Friction Torque for a Deep Groove Ball Bearing in a Permanent Magnet Synchronous Motor

Xu, Yajun (School of Marine Science and Technology, Northwestern Polytechnical University, Xi'an, China); Li, Xinbin; Liu, Jing **Source:** *Lecture Notes in Mechanical Engineering*, p 1797-1806, 2024, *Proceedings of the 2nd International Conference on Mechanical System Dynamics - ICMSD 2023*
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

13. Skidding and spinning investigation for dry-lubricated angular contact ball bearing under combined loads (*Open Access*)

Zhao, Yuhao (State Key Laboratory for Manufacturing and Systems Engineering, Xi'an Jiaotong University, Xi'an; 710049, China); Ma, Zikui; Zi, Yanyang **Source:** *Friction*, v 11, n 11, p 1987-2007, November 2023
Open Access type(s): All Open Access, Gold, Green
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

14. Effect of dented residual stress on the surface-defect-induced pitting under rolling contact loading of M50 bearing steel

Li, Wanjia (School of Mechatronics Engineering, Harbin Institute of Technology, Heilongjiang, Harbin; 150001, China); Meng, Xiangxu; Shu, Kun; Zheng, Dezhi; Wang, Tingjian; Gu, Le; Wang, Liqin; Zhang, Chuanwei **Source:** *Tribology International*, v 194, June 2024
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

15. Influence of White Etching Bands Formation on Integrity of Rolling Element Bearings (*Open Access*)

El Laithy, Mostafa (National Center for Advanced Tribology at Southampton (nCATS), University of Southampton, University Road, Southampton; SO17 1BJ, United Kingdom); Wang, Ling; Harvey, Terry J.; Vierneusel, Bernd **Source:** *Tribology Online*, v 18, n 6, p 373-384, October 31, 2023
Open Access type(s): All Open Access, Gold, Green
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

16. Experimental research on heat treatment process and performance of GCr15 steel bearing ring for new energy vehicle drive motor

Yang, Jianxi (College of Sino-German, Taizhou Vocational & Technical College, Zhejiang, Taizhou; 318000, China); Lin, Haibo; Zhang, Hongwei **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 12983, 2024, *Second International Conference on Electrical, Electronics, and Information Engineering, EEIE 2023*
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

17. A nonlinear dynamic analysis of skidding behavior in rolling bearings using lubricant traction coefficients and cage flexibility

Atef, Mahmoud M. (Industrial and Manufacturing Engineering Department, School of Innovative Design Engineering, Egypt-Japan University of Science and Technology, New Borg El-Arab City; 21934, Egypt); Khair-Eldeen, Wael; Yan, Jiwang; Nassef, Mohamed G.A. **Source:** *Tribology International*, v 197, September 2024
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

18. A study on the three key concepts of White Etching Crack failure mode in its very early stages - Contrast with different testing methods (*Open Access*)

López-Uruñuela, Fernando José (Tekniker, Basque Research and Technology Alliance (BRTA), C/ Iñaki Goenaga, 5, Eibar; 20600, Spain); Wang, Ling; Fernández, Beatriz; Aguirrebeitia, Josu; Pinedo, Bihotz **Source:** *Wear*, v 530-531, October 15, 2023
Open Access type(s): All Open Access, Green
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

19. **Characteristics of vibration response of ball bearing with local defect considering skidding**

Tian, Yu (School of Mechanical and Electrical Engineering, Lanzhou University of Technology, Lanzhou; 730050, China); Yan, Changfeng; Liu, Yaofeng; Luo, Wei; Kang, Jianxiong; Wang, Zonggang; Wu, Lixiao **Source:** *Journal of Mechanical Science and Technology*, v 37, n 11, p 5695-5711, November 2023
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

20. **Measurement of Internal Residual Stress of Three-Directional Components and Estimation of Inherent Strain in Carburized Steel for Large Rolling Bearings by Combining the Contour Method and XRD Method** (*Open Access*)

Tsutsumi, Masako (Core Technology R&D Center, NSK Ltd., Fujisawa; 251-8501, Japan); Yamagami, Shota; Narasaki, Kunio; Watanuki, Daisuke; Miyamoto, Yuji; Ma, Ninshu **Source:** *Materials Transactions*, v 65, n 9, p 1099-1107, September 1, 2024
Open Access type(s): All Open Access, Bronze
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

21. **Skidding behavior of lubricated rolling element bearings under the influence of oil film and radial clearances** (*Open Access*)

Xu, Minmin (School of Mechanical Engineering, Guangxi University, Nanning; 530004, China); Wang, Mingchun; He, Dong; Ding, Xiaoxi; Shao, Yimin; Gu, Fengshou **Source:** *Tribology International*, v 194, June 2024
Open Access type(s): All Open Access, Green
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

22. **Roller Bearing Skidding for Aero-Engine Applications: All-Steel Versus Hybrid Bearings**

Dadouche, Azzedine (Aerospace Research Centre, National Research Council of Canada, Ottawa; ON; K1A 0R6, Canada); Kerrouche, Rami **Source:** *Journal of Engineering for Gas Turbines and Power*, v 145, n 1, February 1, 2023
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

23. **Dynamic, thermal, and vibrational analysis of ball bearings with over-skidding behavior** (*Open Access*)

Gao, Shuai (Department of Mechanical Engineering, Politecnico di Milano, Via G. La Masa 1, Milan; 20156, Italy); Han, Qinkai; Pennacchi, Paolo; Chatterton, Steven; Chu, Fulei **Source:** *Friction*, v 11, n 4, p 580-601, April 2023
Open Access type(s): All Open Access, Gold, Green
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

24. **Thoughts on a standardized FE-8 Test for the assessment of the WEC-carrying capacity of lubricants in rolling bearings**

Leimann, Dirk-Olaf (Düsseldorfer Straße 4, Moers; 47441, Germany) **Source:** *Tribologie und Schmierungstechnik*, v 71, n 3, p 32-39, 2024
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.

25. **The effect of current and lambda on white-etch-crack failures** (*Open Access*)

Demas, Nicholaos G. (Argonne National Laboratory, United States); Lorenzo-Martin, Cinta; Luna, Ryan; Erck, Robert A.; Greco, Aaron C. **Source:** *Tribology International*, v 189, November 2023
Open Access type(s): All Open Access, Green
Database: Compendex
Data Provider: Engineering Village
Compilation and indexing terms, Copyright 2026 Elsevier Inc.