Sensors (2022-2025)

Browse in the web

1. **Ultrasensitive Chemiresistive Gas Sensors Based on Dual-Mesoporous Zinc Stannate Composites for Room Temperature Rice Quality Monitoring (Article)**
   Jinyong Xu, Xuxiong Fan, Kaichun Xu, Kaidi Wu, Hanlin Liao & Chao Zhang
   Nano-Micro Lett. 17, 115 (2025). https://doi.org/10.1007/s40820-024-01645-5
2. **Wearable Biodevices Based on Two-Dimensional Materials: From Flexible Sensors to Smart Integrated Systems (Review)**
   Yingzhi Sun, Weiyi He, Can Jiang, Jing Li, Jianli Liu & Mingjie Liu
   Nano-Micro Lett. 17, 109 (2025). https://doi.org/10.1007/s40820-024-01597-w
3. **Advancements in Passive Wireless Sensing Systems in Monitoring Harsh Environment and Healthcare Applications (Review)**
   Wei Yue, Yunjian Guo, Jong-Chul Lee, Enkhzaya Ganbold, Jia-Kang Wu, Yang Li, Cong Wang, Hyun Soo Kim, Young-Kee Shin, Jun-Ge Liang, Eun-Seong Kim & Nam-Young Kim
   Nano-Micro Lett. 17, 106 (2025). https://doi.org/10.1007/s40820-024-01599-8
4. **Ti3C2Tx Composite Aerogels Enable Pressure Sensors for Dialect Speech Recognition Assisted by Deep Learning (Article)**
   Yanan Xiao, He Li, Tianyi Gu, Xiaoteng Jia, Shixiang Sun, Yong Liu, Bin Wang, He Tian, Peng Sun, Fangmeng Liu & Geyu Lu
   Nano-Micro Lett. 17, 101 (2025). https://doi.org/10.1007/s40820-024-01605-z
5. **Carbon Dots-Modified Hollow Mesoporous Photonic Crystal Materials for Sensitivity- and Selectivity-Enhanced Sensing of Chloroform Vapor (Article)**
   Junchen Liu, Ji Liu, Zhipeng Li, Liupeng Zhao, Tianshuang Wang, Xu Yan, Fangmeng Liu, Xiaomin Li, Qin Li, Peng Sun, Geyu Lu & Dongyuan Zhao
   Nano-Micro Lett. 17, 96 (2025). https://doi.org/10.1007/s40820-024-01598-9
6. **Ammonium Sensing Patch with Ultrawide Linear Range and Eliminated Interference for Universal Body Fluids Analysis (Article)**
   Mingli Huang, Xiaohao Ma, Zongze Wu, Jirong Li, Yuqing Shi, Teng Yang, Jiarun Xu, Shuhan Wang, Kongpeng Lv & Yuanjing Lin
   Nano-Micro Lett. 17, 92 (2025). https://doi.org/10.1007/s40820-024-01602-2
7. **Skin-Friendly Large Matrix Iontronic Sensing Meta-Fabric for Spasticity Visualization and Rehabilitation Training via Piezo-Ionic Dynamics (Article)**
   Ruidong Xu, Tong Xu, Minghua She, Xinran Ji, Ganghua Li, Shijin Zhang, Xinwei Zhang, Hong Liu, Bin Sun, Guozhen Shen & Mingwei Tian
   Nano-Micro Lett. 17, 90 (2025). https://doi.org/10.1007/s40820-024-01566-3
8. **Unlocking Novel Functionality: Pseudocapacitive Sensing in MXene-Based Flexible Supercapacitors (Article)**

Eunji Kim, Seongbeen Kim, Hyeong Min Jin, Gyungtae Kim, Hwi-Heon Ha, Yunhui Choi, Kyoungha Min, Su-Ho Cho, Hee Han, Chi Won Ahn, Jaewoo Roh, Il-Kwon Oh, Jinwoo Lee & Yonghee Lee

Nano-Micro Lett. 17, 86 (2025). https://doi.org/10.1007/s40820-024-01567-2

9. **A Multifunctional Hydrogel with Multimodal Self-Powered Sensing Capability and Stable Direct Current Output for Outdoor Plant Monitoring Systems (Article)**

Xinge Guo, Luwei Wang, Zhenyang Jin & Chengkuo Lee

Nano-Micro Lett. 17, 76 (2025). https://doi.org/10.1007/s40820-024-01587-y

10. **A Fully-Printed Wearable Bandage-Based Electrochemical Sensor with pH Correction for Wound Infection Monitoring (Article)**

Kanyawee Kaewpradub, Kornautchaya Veenuttranon, Husanai Jantapaso, Pimonsri Mittraparp-arthorn & Itthipon Jeerapan

Nano-Micro Lett. 17, 71 (2025). https://doi.org/10.1007/s40820-024-01561-8

11. **Bioinspired Ultrasensitive Flexible Strain Sensors for Real-Time Wireless Detection of Liquid Leakage (Article)**

Weilong Zhou, Yu Du, Yingying Chen, Congyuan Zhang, Xiaowei Ning, Heng Xie, Ting Wu, Jinlian Hu & Jinping Qu

Nano-Micro Lett. 17, 68 (2025). https://doi.org/10.1007/s40820-024-01575-2

12. **MXene Hybridized Polymer with Enhanced Electromagnetic Energy Harvest for Sensitized Microwave Actuation and Self-Powered Motion Sensing (Article)**

Yu-Ze Wang, Yu-Chang Wang, Ting-Ting Liu, Quan-Liang Zhao, Chen-Sha Li & Mao-Sheng Cao

Nano-Micro Lett. 17, 65 (2025). https://doi.org/10.1007/s40820-024-01578-z

13. **Flexible Strain Sensors with Ultra-High Sensitivity and Wide Range Enabled by Crack-Modulated Electrical Pathways (Article)**

Yunzhao Bai, Yunlei Zhou, Xuanyu Wu, Mengfei Yin, Liting Yin, Shiyuan Qu, Fan Zhang, Kan Li & YongAn Huang

Nano-Micro Lett. 17, 64 (2025). https://doi.org/10.1007/s40820-024-01571-6

14. **An Artificial Intelligence-Assisted Flexible and Wearable Mechanoluminescent Strain Sensor System (Article)**

Yan Dong, Wenzheng An, Zihu Wang & Dongzhi Zhang

Nano-Micro Lett. 17, 62 (2025). https://doi.org/10.1007/s40820-024-01572-5

15. **Smart Gas Sensors: Recent Developments and Future Prospective (Review)**

Boyang Zong, Shufang Wu, Yuehong Yang, Qiuju Li, Tian Tao & Shun Mao

Nano-Micro Lett. 17, 54 (2025). https://doi.org/10.1007/s40820-024-01543-w

16. **A Flexible Smart Healthcare Platform Conjugated with Artificial Epidermis Assembled by Three-Dimensionally Conductive MOF Network for Gas and Pressure Sensing (Article)**

Qingqing Zhou, Qihang Ding, Zixun Geng, Chencheng Hu, Long Yang, Zitong Kan, Biao Dong, Miae Won, Hongwei Song, Lin Xu & Jong Seung Kim

Nano-Micro Lett. 17, 50 (2025). https://doi.org/10.1007/s40820-024-01548-5

17. **Ultra-High Sensitivity Anisotropic Piezoelectric Sensors for Structural Health Monitoring and Robotic Perception (Article)**
    Hao Yin, Yanting Li, Zhiying Tian, Qichao Li, Chenhui Jiang, Enfu Liang & Yiping Guo
    Nano-Micro Lett. 17, 42 (2025). https://doi.org/10.1007/s40820-024-01539-6
18. **A Rapid Adaptation Approach for Dynamic Air-Writing Recognition Using Wearable Wristbands with Self-Supervised Contrastive Learning (Article)**
    Yunjian Guo, Kunpeng Li, Wei Yue, Nam-Young Kim, Yang Li, Guozhen Shen & Jong-Chul Lee
    Nano-Micro Lett. 17, 41 (2025). https://doi.org/10.1007/s40820-024-01545-8
19. **Bioinspired Passive Tactile Sensors Enabled by Reversible Polarization of Conjugated Polymers (Article)**
    Feng He, Sitong Chen, Ruili Zhou, Hanyu Diao, Yangyang Han & Xiaodong Wu
    Nano-Micro Lett. 17, 16 (2025). https://doi.org/10.1007/s40820-024-01532-z
20. **Tailoring Light–Matter Interactions in Overcoupled Resonator for Biomolecule Recognition and Detection (Article)**
    Dongxiao Li, Hong Zhou, Zhihao Ren, Cheng Xu & Chengkuo Lee
    Nano-Micro Lett. 17, 10 (2025). https://doi.org/10.1007/s40820-024-01520-3
21. **Highly Sensitive Ammonia Gas Sensors at Room Temperature Based on the Catalytic Mechanism of N, C Coordinated Ni Single-Atom Active Center (Article)**
    Wenjing Quan, Jia Shi, Min Zeng, Wen Lv, Xiyu Chen, Chao Fan, Yongwei Zhang, Zhou Liu, Xiaolu Huang, Jianhua Yang, Nantao Hu, Tao Wang & Zhi Yang
    Nano-Micro Lett. 16, 277 (2024). https://doi.org/10.1007/s40820-024-01484-4
22. **Light-Activated Virtual Sensor Array with Machine Learning for Non-Invasive Diagnosis of Coronary Heart Disease (Article)**
    Jiawang Hu, Hao Qian, Sanyang Han, Ping Zhang & Yuan Lu
    Nano-Micro Lett. 16, 274 (2024). https://doi.org/10.1007/s40820-024-01481-7
23. **Overcoming the Limits of Cross-Sensitivity: Pattern Recognition Methods for Chemiresistive Gas Sensor Array (Review)**
    Haixia Mei, Jingyi Peng, Tao Wang, Tingting Zhou, Hongran Zhao, Tong Zhang & Zhi Yang
    Nano-Micro Lett. 16, 269 (2024). https://doi.org/10.1007/s40820-024-01489-z
24. **Blade-Coated Porous 3D Carbon Composite Electrodes Coupled with Multiscale Interfaces for Highly Sensitive All-Paper Pressure Sensors (Article)**
    Bowen Zheng, Ruisheng Guo, Xiaoqiang Dou, Yueqing Fu, Bingjun Yang, Xuqing Liu & Feng Zhou
    Nano-Micro Lett. 16, 267 (2024). https://doi.org/10.1007/s40820-024-01488-0
25. **Real-Time Tunable Gas Sensing Platform Based on SnO2 Nanoparticles Activated by Blue Micro-Light-Emitting Diodes (Article)**
    Gi Baek Nam, Jung-El Ryu, Tae Hoon Eom, Seung Ju Kim, Jun Min Suh, Seungmin Lee, Sungkyun Choi, Cheon Woo Moon, Seon Ju Park, Soo Min Lee, Byungsoo Kim, Sung Hyuk Park, Jin Wook Yang, Sangjin Min, Sohyeon Park, Sung Hwan Cho, Hyuk Jin Kim, Sang Eon Jun, Tae Hyung Lee,

Yeong Jae Kim, Jae Young Kim, Young Joon Hong, Jong-In Shim, Hyung-Gi Byun, Yongjo Park, Inkyu Park, Sang-Wan Ryu & Ho Won Jang

Nano-Micro Lett. 16, 261 (2024). https://doi.org/10.1007/s40820-024-01486-2

26. **Design of AI-Enhanced and Hardware-Supported Multimodal E-Skin for Environmental Object Recognition and Wireless Toxic Gas Alarm (Article)**

Jianye Li, Hao Wang, Yibing Luo, Zijing Zhou, He Zhang, Huizhi Chen, Kai Tao, Chuan Liu, Lingxing Zeng, Fengwei Huo & Jin Wu

Nano-Micro Lett. 16, 256 (2024). https://doi.org/10.1007/s40820-024-01466-6

27. **Heterogeneous CuxO Nano-Skeletons from Waste Electronics for Enhanced Glucose Detection (Article)**

Yexin Pan, Ruohan Yu, Yalong Jiang, Haosong Zhong, Qiaoyaxiao Yuan, Connie Kong Wai Lee, Rongliang Yang, Siyu Chen, Yi Chen, Wing Yan Poon & Mitch Guijun Li

Nano-Micro Lett. 16, 249 (2024). https://doi.org/10.1007/s40820-024-01467-5

28. **Ultrafast Response and Threshold Adjustable Intelligent Thermoelectric Systems for Next-Generation Self-Powered Remote IoT Fire Warning (Article)**

Zhaofu Ding, Gang Li, Yejun Wang, Chunyu Du, Zhenqiang Ye, Lirong Liang, Long-Cheng Tang & Guangming Chen

Nano-Micro Lett. 16, 242 (2024). https://doi.org/10.1007/s40820-024-01453-x

29. **Transient Response and Ionic Dynamics in Organic Electrochemical Transistors (Review)**

Chao Zhao, Jintao Yang & Wei Ma

Nano-Micro Lett. 16, 233 (2024). https://doi.org/10.1007/s40820-024-01452-y

30. **Multifunctional MXene/Carbon Nanotube Janus Film for Electromagnetic Shielding and Infrared Shielding/Detection in Harsh Environments (Article)**

Tufail Hassan, Aamir Iqbal, Byungkwon Yoo, Jun Young Jo, Nilufer Cakmakci, Shabbir Madad Naqvi, Hyerim Kim, Sungmin Jung, Noushad Hussain, Ujala Zafar, Soo Yeong Cho, Seunghwan Jeong, Jaewoo Kim, Jung Min Oh, Sangwoon Park, Youngjin Jeong & Chong Min Koo

Nano-Micro Lett. 16, 216 (2024). https://doi.org/10.1007/s40820-024-01431-3

31. **MXene Key Composites: A New Arena for Gas Sensors (Review)**

Yitong Wang, Yuhua Wang, Min Jian, Qinting Jiang & Xifei Li

Nano-Micro Lett. 16, 209 (2024). https://doi.org/10.1007/s40820-024-01430-4

32. **Facile Semiconductor p–n Homojunction Nanowires with Strategic p-Type Doping Engineering Combined with Surface Reconstruction for Biosensing Applications (Article)**

Liuan Li, Shi Fang, Wei Chen, Yueyue Li, Mohammad Fazel Vafadar, Danhao Wang, Yang Kang, Xin Liu, Yuanmin Luo, Kun Liang, Yiping Dang, Lei Zhao, Songrui Zhao, Zongzhi Yin & Haiding Sun

Nano-Micro Lett. 16, 192 (2024). https://doi.org/10.1007/s40820-024-01394-5

33. **Functional Optical Fiber Sensors Detecting Imperceptible Physical/Chemical Changes for Smart Batteries (Review)**

Yiding Li, Li Wang, Youzhi Song, Wenwei Wang, Cheng Lin & Xiangming He

Nano-Micro Lett. 16, 154 (2024). https://doi.org/10.1007/s40820-024-01374-9

34. **Building Feedback-Regulation System Through Atomic Design for Highly Active SO2 Sensing (Article)**

Xin Jia, Panzhe Qiao, Xiaowu Wang, Muyu Yan, Yang Chen, Bao-Li An, Pengfei Hu, Bo Lu, Jing Xu, Zhenggang Xue & Jiaqiang Xu

Nano-Micro Lett. 16, 136 (2024). https://doi.org/10.1007/s40820-024-01350-3

35. **MXene-Based Elastomer Mimetic Stretchable Sensors: Design, Properties, and Applications (Review)**

Poushali Das, Parham Khoshbakht Marvi, Sayan Ganguly, Xiaowu (Shirley) Tang, Bo Wang, Seshasai Srinivasan, Amin Reza Rajabzadeh & Andreas Rosenkranz

Nano-Micro Lett. 16, 135 (2024). https://doi.org/10.1007/s40820-024-01349-w

36. **Laser-Induced and MOF-Derived Metal Oxide/Carbon Composite for Synergistically Improved Ethanol Sensing at Room temperature (Article)**

Hyeongtae Lim, Hyeokjin Kwon, Hongki Kang, Jae Eun Jang & Hyuk-Jun Kwon

Nano-Micro Lett. 16, 113 (2024). https://doi.org/10.1007/s40820-024-01332-5

37. **Tailoring MXene Thickness and Functionalization for Enhanced Room-Temperature Trace NO2 Sensing (Article)**

Muhammad Hilal, Woochul Yang, Yongha Hwang & Wanfeng Xie

Nano-Micro Lett. 16, 84 (2024). https://doi.org/10.1007/s40820-023-01316-x

38. **Bioinspired Multifunctional Self-Sensing Actuated Gradient Hydrogel for Soft-Hard Robot Remote Interaction (Article)**

He Liu, Haoxiang Chu, Hailiang Yuan, Deliang Li, Weisi Deng, Zhiwei Fu, Ruonan Liu, Yiying Liu, Yixuan Han, Yanpeng Wang, Yue Zhao, Xiaoyu Cui & Ye Tian

Nano-Micro Lett. 16, 69 (2024). https://doi.org/10.1007/s40820-023-01287-z

39. **Implantable Electrochemical Microsensors for In Vivo Monitoring of Animal Physiological Information (Review)**

Jin Zhou, Shenghan Zhou, Peidi Fan, Xunjia Li, Yibin Ying, Jianfeng Ping & Yuxiang Pan

Nano-Micro Lett. 16, 49 (2024). https://doi.org/10.1007/s40820-023-01274-4

40. **Untethered Micro/Nanorobots for Remote Sensing: Toward Intelligent Platform (Review)**

Qianqian Wang, Shihao Yang & Li Zhang

Nano-Micro Lett. 16, 40 (2024). https://doi.org/10.1007/s40820-023-01261-9

41. **Advances of Electrochemical and Electrochemiluminescent Sensors Based on Covalent Organic Frameworks (Review)**

Yue Cao, Ru Wu, Yan-Yan Gao, Yang Zhou & Jun-Jie Zhu

Nano-Micro Lett. 16, 37 (2024). https://doi.org/10.1007/s40820-023-01249-5

42. **A Selective-Response Hypersensitive Bio-Inspired Strain Sensor Enabled by Hysteresis Effect and Parallel Through-Slits Structures (Article)**

Qun Wang, Zhongwen Yao, Changchao Zhang, Honglie Song, Hanliang Ding, Bo Li, Shichao Niu, Xinguan Huang, Chuanhai Chen, Zhiwu Han & Luquan Ren

Nano-Micro Lett. 16, 26 (2024). https://doi.org/10.1007/s40820-023-01250-y

43. **Artificial Intelligence Meets Flexible Sensors: Emerging Smart Flexible Sensing Systems Driven by Machine Learning and Artificial Synapses (Review)**
Tianming Sun, Bin Feng, Jinpeng Huo, Yu Xiao, Wengan Wang, Jin Peng, Zehua Li, Chengjie Du, Wenxian Wang, Guisheng Zou & Lei Liu
Nano-Micro Lett. 16, 14 (2024). https://doi.org/10.1007/s40820-023-01235-x
44. **Intelligent Recognition Using Ultralight Multifunctional Nano-Layered Carbon Aerogel Sensors with Human-Like Tactile Perception (Article)**
Huiqi Zhao, Yizheng Zhang, Lei Han, Weiqi Qian, Jiabin Wang, Heting Wu, Jingchen Li, Yuan Dai, Zhengyou Zhang, Chris R. Bowen & Ya Yang
Nano-Micro Lett. 16, 11 (2024). https://doi.org/10.1007/s40820-023-01216-0
45. **A Broad Range Triboelectric Stiffness Sensor for Variable Inclusions Recognition(Article)**
Ziyi Zhao, Zhentan Quan, Huaze Tang, Qinghao Xu, Hongfa Zhao, Zihan Wang, Ziwu Song, Shoujie Li, Ishara Dharmasena, Changsheng Wu & Wenbo Ding
Nano-Micro Lett. 15, 233 (2023). https://doi.org/10.1007/s40820-023-01201-7
46. **Swift Assembly of Adaptive Thermocell Arrays for Device-Level Healable and Energy-Autonomous Motion Sensors (Article)**
Xin Lu, Daibin Xie, Kaihua Zhu, Shouhao Wei, Ziwei Mo, Chunyu Du, Lirong Liang, Guangming Chen & Zhuoxin Liu
Nano-Micro Lett. 15, 196 (2023). https://doi.org/10.1007/s40820-023-01170-x
47. **Outstanding Humidity Chemiresistors Based on Imine-Linked Covalent Organic Framework Films for Human Respiration Monitoring (Article)**
Xiyu Chen, Lingwei Kong, Jaafar Abdul-Aziz Mehrez, Chao Fan, Wenjing Quan, Yongwei Zhang, Min Zeng, Jianhua Yang, Nantao Hu, Yanjie Su, Hao Wei & Zhi Yang
Nano-Micro Lett. 15, 149 (2023). https://doi.org/10.1007/s40820-023-01107-4
48. **Functionalized Hydrogel-Based Wearable Gas and Humidity Sensors (Review)**
Yibing Luo, Jianye Li, Qiongling Ding, Hao Wang, Chuan Liu & Jin Wu
Nano-Micro Lett. 15, 136 (2023). https://doi.org/10.1007/s40820-023-01109-2
49. **Green Fabrication of Freestanding Piezoceramic Films for Energy Harvesting and Virus Detection (Article)**
Shiyuan Liu, Junchen Liao, Xin Huang, Zhuomin Zhang, Weijun Wang, Xuyang Wang, Yao Shan, Pengyu Li, Ying Hong, Zehua Peng, Xuemu Li, Bee Luan Khoo, Johnny C. Ho & Zhengbao Yang
Nano-Micro Lett. 15, 131 (2023). https://doi.org/10.1007/s40820-023-01105-6
50. **Two-Dimensional Metal Halides for X-Ray Detection Applications (Review)**
Yumin Li, Yutian Lei, Haoxu Wang & Zhiwen Jin
Nano-Micro Lett. 15, 128 (2023). https://doi.org/10.1007/s40820-023-01118-1
51. **Nanocellulose-Assisted Construction of Multifunctional MXene-Based Aerogels with Engineering Biomimetic Texture for Pressure Sensor and Compressible Electrode (Article)**

Ting Xu, Qun Song, Kun Liu, Huayu Liu, Junjie Pan, Wei Liu, Lin Dai, Meng Zhang, Yaxuan Wang, Chuanling Si, Haishun Du & Kai Zhang

Nano-Micro Lett. 15, 98 (2023). https://doi.org/10.1007/s40820-023-01073-x

52. **Advances in Noble Metal-Decorated Metal Oxide Nanomaterials for Chemiresistive Gas Sensors: Overview (Review)**

Li-Yuan Zhu, Lang-Xi Ou, Li-Wen Mao, Xue-Yan Wu, Yi-Ping Liu & Hong-Liang Lu

Nano-Micro Lett. 15, 89 (2023). https://doi.org/10.1007/s40820-023-01047-z

53. **Highly Ordered Thermoplastic Polyurethane/Aramid Nanofiber Conductive Foams Modulated by Kevlar Polyanion for Piezoresistive Sensing and Electromagnetic Interference Shielding (Original Article)**

Kunpeng Qian, Jianyu Zhou, Miao Miao, Hongmin Wu, Sineenat Thaiboonrod, Jianhui Fang & Xin Feng

Nano-Micro Lett. 15, 88 (2023). https://doi.org/10.1007/s40820-023-01062-0

54. **Screen-Printable Functional Nanomaterials for Flexible and Wearable Single-Enzyme-Based Energy-Harvesting and Self-Powered Biosensing Devices (Original Article)**

Kornautchaya Veenuttranon, Kanyawee Kaewpradub & Itthipon Jeerapan

Nano-Micro Lett. 15, 85 (2023). https://doi.org/10.1007/s40820-023-01045-1

55. **Self-Healing Liquid Metal Magnetic Hydrogels for Smart Feedback Sensors and High-Performance Electromagnetic Shielding (Original Article)**

Biao Zhao, Zhongyi Bai, Hualiang Lv, Zhikai Yan, Yiqian Du, Xiaoqin Guo, Jincang Zhang, Limin Wu, Jiushuai Deng, David Wei Zhang & Renchao Che

Nano-Micro Lett. 15, 79 (2023). https://doi.org/10.1007/s40820-023-01043-3

56. **Mechanoluminescent-Triboelectric Bimodal Sensors for Self-Powered Sensing and Intelligent Control (Article)**

Bo Zhou, Jize Liu, Xin Huang, Xiaoyan Qiu, Xin Yang, Hong Shao, Changyu Tang & Xinxing Zhang

Nano-Micro Lett. 15, 72 (2023). https://doi.org/10.1007/s40820-023-01054-0

57. **Bioinspired All-Fibrous Directional Moisture-Wicking Electronic Skins for Biomechanical Energy Harvesting and All-Range Health Sensing (Article)**

Chuanwei Zhi, Shuo Shi, Shuai Zhang, Yifan Si, Jieqiong Yang, Shuo Meng, Bin Fei & Jinlian Hu

Nano-Micro Lett. 15, 60 (2023). https://doi.org/10.1007/s40820-023-01028-2

58. **Machine Learning-Enhanced Flexible Mechanical Sensing (Review)**

Yuejiao Wang, Mukhtar Lawan Adam, Yunlong Zhao, Weihao Zheng, Libo Gao, Zongyou Yin & Haitao Zhao

Nano-Micro Lett. 15, 55 (2023). https://doi.org/10.1007/s40820-023-01013-9

59. **Ultrasensitive and Highly Stretchable Multiple-Crosslinked Ionic Hydrogel Sensors with Long-Term Stability (Article)**

Jin-Young Yu, Seung Eon Moon, Jeong Hun Kim & Seong Min Kang

Nano-Micro Lett. 15, 51 (2023). https://doi.org/10.1007/s40820-023-01015-7

60. **A Self-Powered, Highly Embedded and Sensitive Tribo-Label-Sensor for the Fast and Stable Label Printer (Article)**
    Xindan Hui, Zhongjie Li, Lirong Tang, Jianfeng Sun, Xingzhe Hou, Jie Chen, Yan Peng, Zhiyi Wu & Hengyu Guo
    Nano-Micro Lett. 15, 27 (2023). https://doi.org/10.1007/s40820-022-00999-y
61. **MOF/Polymer-Integrated Multi-Hotspot Mid-Infrared Nanoantennas for Sensitive Detection of CO_2 Gas (Article)**
    Hong Zhou, Zhihao Ren, Cheng Xu, Liangge Xu & Chengkuo Lee
    Nano-Micro Lett. 14, 207 (2022). https://doi.org/10.1007/s40820-022-00950-1
62. **Recent Progress on Flexible Room-Temperature Gas Sensors Based on Metal Oxide Semiconductor (Review)**
    Lang-Xi Ou, Meng-Yang Liu, Li-Yuan Zhu, David Wei Zhang & Hong-Liang Lu
    Nano-Micro Lett. 14, 206 (2022). https://doi.org/10.1007/s40820-022-00956-9
63. **Progress of Materials and Devices for Neuromorphic Vision Sensors (Review)**
    Sung Woon Cho, Chanho Jo, Yong-Hoon Kim & Sung Kyu Park
    Nano-Micro Lett. 14, 203 (2022). https://doi.org/10.1007/s40820-022-00945-y
64. **Recent Advances on Early-Stage Fire-Warning Systems: Mechanism, Performance, and Perspective (Review)**
    Xiaolu Li, Antonio Vázquez-López, José Sánchez del Río Saeza & De-Yi Wang
    Nano-Micro Lett. 14, 197 (2022). https://doi.org/10.1007/s40820-022-00938-x
65. **Humidity Sensing of Stretchable and Transparent Hydrogel Films for Wireless Respiration Monitoring (Article)**
    Yuning Liang, Qiongling Ding, Hao Wang, Zixuan Wu, Jianye Li, Zhenyi Li, Kai Tao, Xuchun Gui & Jin Wu
    Nano-Micro Lett. 14, 183 (2022). https://doi.org/10.1007/s40820-022-00934-1
66. **Multifunctional Flexible Humidity Sensor Systems Towards Noncontact Wearable Electronics (Review)**
    Yuyao Lu, Geng Yang, Yajing Shen, Huayong Yang & Kaichen Xu
    Nano-Micro Lett. 14, 150 (2022). https://doi.org/10.1007/s40820-022-00895-5
67. **Morphological Engineering of Sensing Materials for Flexible Pressure Sensors and Artificial Intelligence Applications (Review)**
    Zhengya Shi, Lingxian Meng, Xinlei Shi, Hongpeng Li, Juzhong Zhang, Qingqing Sun, Xuying Liu, Jinzhou Chen & Shuiren Liu
    Nano-Micro Lett. 14, 141 (2022). https://doi.org/10.1007/s40820-022-00874-w
68. **Full-Fiber Auxetic-Interlaced Yarn Sensor for Sign-Language Translation Glove Assisted by Artificial Neural Network (Article)**
    Ronghui Wu, Sangjin Seo, Liyun Ma, Juyeol Bae & Taesung Kim
    Nano-Micro Lett. 14, 139 (2022). https://doi.org/10.1007/s40820-022-00887-5

69. **An All-In-One Multifunctional Touch Sensor with Carbon-Based Gradient Resistance Elements (Article)**
Chao Wei, Wansheng Lin, Shaofeng Liang, Mengjiao Chen, Yuanjin Zheng, Xinqin Liao & Zhong Chen
Nano-Micro Lett. 14, 131 (2022). https://doi.org/10.1007/s40820-022-00875-9
70. **Bioinspired MXene-Based User-Interactive Electronic Skin for Digital and Visual Dual-Channel Sensing (Article)**
Wentao Cao, Zheng Wang, Xiaohao Liu, Zhi Zhou, Yue Zhang, Shisheng He, Daxiang Cui & Feng Chen
Nano-Micro Lett. 14, 119 (2022). https://doi.org/10.1007/s40820-022-00838-0
71. **Next-Generation Intelligent MXene-Based Electrochemical Aptasensors for Point-of-Care Cancer Diagnostics (Review)**
Arpana Parihar, Ayushi Singhal, Neeraj Kumar, Raju Khan, Mohd. Akram Khan & Avanish K. Srivastava
Nano-Micro Lett. 14, 100 (2022). https://doi.org/10.1007/s40820-022-00845-1
72. **Fire Intumescent, High-Temperature Resistant, Mechanically Flexible Graphene Oxide Network for Exceptional Fire Shielding and Ultra-Fast Fire Warning (Article)**
Cheng-Fei Cao, Bin Yu, Zuan-Yu Chen, Yong-Xiang Qu, Yu-Tong Li, Yong-Qian Shi, Zhe-Wen Ma, Feng-Na Sun, Qing-Hua Pan, Long-Cheng Tang, Pingan Song & Hao Wang
Nano-Micro Lett. 14, 92 (2022). https://doi.org/10.1007/s40820-022-00837-1
73. **A Liquid–Solid Interface-Based Triboelectric Tactile Sensor with Ultrahigh Sensitivity of 21.48 kPa^{-1} (Article)**
Jingya Liu, Zhen Wen, Hao Lei, Zhenqiu Gao & Xuhui Sun
Nano-Micro Lett. 14, 88 (2022). https://doi.org/10.1007/s40820-022-00831-7
74. **Bioinspired Adaptive, Elastic, and Conductive Graphene Structured Thin-Films Achieving High-Efficiency Underwater Detection and Vibration Perception (Article)**
Qiling Wang, Peng Xiao, Wei Zhou, Yun Liang, Guangqiang Yin, Qiu Yang, Shiao-Wei Kuo & Tao Chen
Nano-Micro Lett. 14, 62 (2022). https://doi.org/10.1007/s40820-022-00799-4
75. **Functionalized Fiber-Based Strain Sensors: Pathway to Next-Generation Wearable Electronics (Review)**
Zekun Liu, Tianxue Zhu, Junru Wang, Zijian Zheng, Yi Li, Jiashen Li & Yuekun Lai
Nano-Micro Lett. 14, 61 (2022). https://doi.org/10.1007/s40820-022-00806-8
76. **Self-Assembly 3D Porous Crumpled MXene Spheres as Efficient Gas and Pressure Sensing Material for Transient All-MXene Sensors (Article)**
Zijie Yang, Siyuan Lv, Yueying Zhang, Jing Wang, Li Jiang, Xiaoteng Jia, Chenguang Wang, Xu Yan, Peng Sun, Yu Duan, Fangmeng Liu & Geyu Lu
Nano-Micro Lett. 14, 56 (2022). https://doi.org/10.1007/s40820-022-00796-7

77. **Self-Healing, Self-Adhesive and Stable Organohydrogel-Based Stretchable Oxygen Sensor with High Performance at Room Temperature (Article)**

    Yuning Liang, Zixuan Wu, Yaoming Wei, Qiongling Ding, Meital Zilberman, Kai Tao, Xi Xie & Jin Wu

    Nano-Micro Lett. 14, 52 (2022). https://doi.org/10.1007/s40820-021-00787-0

78. **Multi-Bandgap Monolithic Metal Nanowire Percolation Network Sensor Integration by Reversible Selective Laser-Induced Redox (Article)**

    Junhyuk Bang, Yeongju Jung, Hyungjun Kim, Dongkwan Kim, Maenghyo Cho & Seung Hwan Ko

    Nano-Micro Lett. 14, 49 (2022). https://doi.org/10.1007/s40820-021-00786-1

79. **High-Porosity Foam-Based Iontronic Pressure Sensor with Superhigh Sensitivity of 9280 kPa^{-1} (Article)**

    Qingxian Liu, Yuan Liu, Junli Shi, Zhiguang Liu, Quan Wang & Chuan Fei Guo

    Nano-Micro Lett. 14, 21 (2022). https://doi.org/10.1007/s40820-021-00770-9

80. **A Novel Artificial Neuron-Like Gas Sensor Constructed from CuS Quantum Dots/Bi_2S_3 Nanosheets (Article)**

    Xinwei Chen, Tao Wang, Jia Shi, Wen Lv, Yutong Han, Min Zeng, Jianhua Yang, Nantao Hu, Yanjie Su, Hao Wei, Zhihua Zhou, Zhi Yang & Yafei Zhang

    Nano-Micro Lett. 14, 8 (2022). https://doi.org/10.1007/s40820-021-00740-1