

# Piezo-catalytic Effect on the Enhancement of the Ultraviolet Dark by Single- and Few-Layers MoS<sub>2</sub> Nanoribbons

Advanced Materials

28, 3718-3725

DOI: 10.1002/adma.201505785

Citation Report

#	ARTICLE	IF	CITATIONS
1	High Piezo-photocatalytic Efficiency of CuS/ZnO Nanowires Using Both Solar and Mechanical Energy for Degrading Organic Dye. ACS Applied Materials & Interfaces, 2016, 8, 21302-21314.	4.0	268
2	Synthesis of PVP-functionalized ultra-small MoS <sub>2</sub> nanoparticles with intrinsic peroxidase-like activity for H <sub>2</sub> O <sub>2</sub> and glucose detection. RSC Advances, 2016, 6, 81174-81183.	1.7	57
3	Flexible thermoelectric nanogenerator based on the MoS <sub>2</sub> /graphene nanocomposite and its application for a self-powered temperature sensor. Semiconductor Science and Technology, 2017, 32, 044003.	1.0	47
4	A highly sensitive FET-type aptasensor using flower-like MoS <sub>2</sub> nanospheres for real-time detection of arsenic(III). Nanoscale, 2017, 9, 7483-7492.	2.8	52
5	Performance and Mechanism of Piezo-Catalytic Degradation of 4-Chlorophenol: Finding of Effective Piezo-Dechlorination. Environmental Science & Technology, 2017, 51, 6560-6569.	4.6	245
6	Synthesis of few-layer 1T-MoTe <sub>2</sub> ultrathin nanosheets for high-performance pseudocapacitors. Journal of Materials Chemistry A, 2017, 5, 1035-1042.	5.2	134
7	Single- and few-layers MoS <sub>2</sub> nanocomposite as piezo-catalyst in dark and self-powered active sensor. Nano Energy, 2017, 31, 575-581.	8.2	135
8	Flower-Like Molybdenum Disulfide for Polarity-Triggered Accumulation/Release of Small Molecules. ACS Applied Materials & Interfaces, 2017, 9, 36431-36437.	4.0	45
9	Ultrahigh efficient degradation activity of single- and few-layered MoSe <sub>2</sub> nanoflowers in dark by piezo-catalyst effect. Nano Energy, 2017, 40, 369-375.	8.2	183
10	Engineering spherical lead zirconate titanate to explore the essence of piezo-catalysis. Nano Energy, 2017, 40, 481-486.	8.2	281
11	Hybridized 1T/2H MoS <sub>2</sub> Having Controlled 1T Concentrations and its use in Supercapacitors. Chemistry - A European Journal, 2017, 23, 17348-17355.	1.7	88
12	Few-layered MoS <sub>2</sub> /C with expanding d-spacing as a high-performance anode for sodium-ion batteries. Nanoscale, 2017, 9, 12189-12195.	2.8	100
13	Flexible contact-electrification field-effect transistor made from the P3HT:PCBM conductive polymer thin film. Applied Materials Today, 2017, 9, 96-103.	2.3	15
14	Large area growth of vertically aligned luminescent MoS <sub>2</sub> nanosheets. Nanoscale, 2017, 9, 277-287.	2.8	54
15	One-dimensional hierarchical structured MoS <sub>2</sub> with an ordered stacking of nanosheets: a facile template-free hydrothermal synthesis strategy and application as an efficient hydrogen evolution electrocatalyst. CrystEngComm, 2017, 19, 218-223.	1.3	5
16	Imprinted MoS <sub>2</sub> achieve highly efficient self-separative molecule extraction. Journal of Materials Chemistry A, 2018, 6, 7395-7400.	5.2	8
17	MoS <sub>2</sub> Quantum Dots@TiO <sub>2</sub> Nanotube Arrays: An Extended-Spectrum-Driven Photocatalyst for Solar Hydrogen Evolution. ChemSusChem, 2018, 11, 1708-1721.	3.6	77
18	Ultrasonication-Induced Aqueous Atom Transfer Radical Polymerization. ACS Macro Letters, 2018, 7, 275-280.	2.3	125

#	ARTICLE	IF	CITATIONS
19	A facile dip-coating method for the preparation of separable MoS <sub>2</sub> sponges and their high-efficient adsorption behaviors of Rhodamine B. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 827-834.	3.0	39
20	High efficient degradation of dye molecules by PDMS embedded abundant single-layer tungsten disulfide and their antibacterial performance. <i>Nano Energy</i> , 2018, 46, 338-346.	8.2	131
21	Piezoelectricity induced water splitting and formation of hydroxyl radical from active edge sites of MoS <sub>2</sub> nanoflowers. <i>Nano Energy</i> , 2018, 46, 372-382.	8.2	133
22	Effective enhancement of piezocatalytic activity of BaTiO <sub>3</sub> nanowires under ultrasonic vibration. <i>Nano Energy</i> , 2018, 45, 44-51.	8.2	458
23	Oxygen Reduction Reaction for Generating H <sub>2</sub> O <sub>2</sub> through a Piezo-Catalytic Process over Bismuth Oxychloride. <i>ChemSusChem</i> , 2018, 11, 527-531.	3.6	78
24	Magnetic-Induced Piezopotential Gated MoS <sub>2</sub> Field-Effect Transistor at Room Temperature. <i>Advanced Materials</i> , 2018, 30, 1704524.	11.1	47
25	Easy-separative MoS <sub>2</sub> -glue sponges with high-efficient dye adsorption and excellent reusability for convenient water treatment. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 540, 112-122.	2.3	47
26	Insights into the Role of Ferroelectric Polarization in Piezocatalysis of Nanocrystalline BaTiO <sub>3</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 17842-17849.	4.0	243
27	Ni <sub>2</sub> P <sub>2</sub> O <sub>7</sub> Nanoarrays with Decorated C <sub>3</sub> N <sub>4</sub> Nanosheets as Efficient Electrode for Supercapacitors. <i>ACS Applied Energy Materials</i> , 2018, 1, 2016-2023.	2.5	50
28	A flexible photo-thermoelectric nanogenerator based on MoS <sub>2</sub> /PU photothermal layer for infrared light harvesting. <i>Nano Energy</i> , 2018, 49, 588-595.	8.2	124
29	Significant Improvement and Mechanism of Ultrasonic Inactivation to <i>Escherichia coli</i> with Piezoelectric Effect of Hydrothermally Synthesized <i>t</i> -BaTiO <sub>3</sub> . <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6032-6041.	3.2	69
30	Enhanced Pyroelectric Catalysis of BaTiO <sub>3</sub> Nanowires for Utilizing Waste Heat in Pollution Treatment. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 37963-37973.	4.0	85
31	Enhanced H <sub>2</sub> evolution based on ultrasound-assisted piezo-catalysis of modified MoS <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , 2018, 6, 11909-11915.	5.2	76
32	Enhanced H <sub>2</sub> Production of TiO <sub>2</sub> /ZnO Nanowires Co-Using Solar and Mechanical Energy through Piezo-Photocatalytic Effect. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 10162-10172.	3.2	101
33	A superior dye adsorbent towards the hydrogen evolution reaction combining active sites and phase-engineering of (1T/2H) MoS <sub>2</sub> /±-MoO <sub>3</sub> hybrid heterostructured nanoflowers. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15320-15329.	5.2	86
34	Enhanced Photocatalytic Degradation Performance by Fluid-Induced Piezoelectric Field. <i>Environmental Science &amp; Technology</i> , 2018, 52, 7842-7848.	4.6	186
35	A comparative study on the photocatalytic degradation of organic dyes using hybridized 1T/2H, 1T/3R and 2H MoS <sub>2</sub> nano-sheets. <i>RSC Advances</i> , 2018, 8, 26364-26370.	1.7	63
36	Enhanced Piezocatalytic Performance of (Ba,Sr)TiO <sub>3</sub> Nanowires to Degrade Organic Pollutants. <i>ACS Applied Nano Materials</i> , 2018, 1, 5119-5127.	2.4	126

#	ARTICLE	IF	CITATIONS
37	Silver modified barium titanate as a highly efficient piezocatalyst. <i>Catalysis Science and Technology</i> , 2018, 8, 4788-4796.	2.1	90
38	Progress in piezotronics of transition-metal dichalcogenides. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 493002.	1.3	15
39	Three-dimensional S-MoS <sub>2</sub> @Fe <sub>2</sub> O <sub>3</sub> nanoparticles composites as lithium-ion battery anodes for enhanced electrochemical performance. <i>Materials Chemistry and Physics</i> , 2018, 219, 311-317.	2.0	11
40	Bimetal Seleno-sulfide CuNiS Nanosheet Catalyst for Methylene Blue Degradation in the Dark. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 4053-4062.	1.0	11
41	Hydrogen Production from Pure Water via Piezoelectric-assisted Visible-light Photocatalysis of CdS Nanorod Arrays. <i>ChemCatChem</i> , 2018, 10, 3397-3401.	1.8	86
42	Efficient piezo-catalytic hydrogen peroxide production from water and oxygen over graphitic carbon nitride. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20383-20389.	5.2	99
43	High-piezocatalytic performance of eco-friendly (Bi <sub>1/2</sub> Na <sub>1/2</sub> )TiO <sub>3</sub> -based nanofibers by electrospinning. <i>Nano Energy</i> , 2019, 65, 104024.	8.2	103
44	Efficient bifunctional piezocatalysis of Au/BiVO <sub>4</sub> for simultaneous removal of 4-chlorophenol and Cr(VI) in water. <i>Applied Catalysis B: Environmental</i> , 2019, 259, 118084.	10.8	164
45	Piezo-promoted the generation of reactive oxygen species and the photodegradation of organic pollutants. <i>Applied Catalysis B: Environmental</i> , 2019, 258, 118024.	10.8	84
46	Piezoelectric Material-Polymer Composite Porous Foam for Efficient Dye Degradation via the Piezo-Catalytic Effect. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 27862-27869.	4.0	156
47	Surface affinity modulation of MoS <sub>2</sub> by hydrothermal synthesis and its intermediary function in interfacial chemistry. <i>Chemical Physics Letters</i> , 2019, 730, 608-611.	1.2	4
48	Piezo-catalytic degradation of Haverliak-Negami type. <i>Journal of Advanced Dielectrics</i> , 2019, 09, 1950021.	1.5	5
49	Performance of hydrogen evolution reaction of R3C ferroelectric ZnSnO <sub>3</sub> nanowires. <i>Nanotechnology</i> , 2019, 30, 455401.	1.3	8
50	Seesaw structured triboelectric nanogenerator with enhanced output performance and its applications in self-powered motion sensing. <i>Nano Energy</i> , 2019, 65, 103944.	8.2	57
51	Piezotronic effect of single/few-layers MoS <sub>2</sub> nanosheets composite with TiO <sub>2</sub> nanorod heterojunction. <i>Nano Energy</i> , 2019, 66, 104168.	8.2	52
52	Sm-doped Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -xPbTiO <sub>3</sub> piezocatalyst: Exploring the relationship between piezoelectric property and piezocatalytic activity. <i>Applied Materials Today</i> , 2019, 17, 183-192.	2.3	66
53	Design and analysis of an axial flux permanent magnet motor for the direct drive radial piston pump. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 7077-7088.	1.1	3
54	Preparation of Novel Ultrathin Co doped MoS <sub>2</sub> Nanosheets Piezocatalyst for Fast Simultaneous Decomposition of Cr(VI) and MB in Dark. <i>Chemical Research in Chinese Universities</i> , 2019, 35, 892-900.	1.3	14

#	ARTICLE	IF	CITATIONS
55	Enhanced piezocatalytic, photocatalytic and piezo-/photocatalytic performance of diphasic Ba <sub>1-x</sub> Ca <sub>x</sub> TiO <sub>3</sub> nanowires near a solubility limit. <i>Catalysis Science and Technology</i> , 2019, 9, 6863-6874.	2.1	57
56	Securing the Device Drivers of Your Embedded Systems. , 2019, , .		2
57	Utilization of the internal electric field in semiconductor photocatalysis: A short review. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 72, 18-30.	2.9	72
58	Preparation of multifunctional PLZT nanowires and their applications in piezocatalysis and transparent flexible films. <i>Journal of Alloys and Compounds</i> , 2019, 811, 152063.	2.8	15
59	Few-layer transition metal dichalcogenides (MoS <sub>2</sub> , WS <sub>2</sub> , and WSe <sub>2</sub> ) for water splitting and degradation of organic pollutants: Understanding the piezocatalytic effect. <i>Nano Energy</i> , 2019, 66, 104083.	8.2	181
60	One-pot synthesis of 3D Cu <sub>2</sub> S@MoS <sub>2</sub> nanocomposites by an ionic liquid-assisted strategy with high photocatalytic activity. <i>New Journal of Chemistry</i> , 2019, 43, 269-276.	1.4	7
61	ZnSnO <sub>3</sub> Nanoparticle-Based Piezocatalysts for Ultrasound-Assisted Degradation of Organic Pollutants. <i>ACS Applied Nano Materials</i> , 2019, 2, 1120-1128.	2.4	128
62	Vibration induced refrigeration and energy harvesting using piezoelectric materials: a finite element study. <i>RSC Advances</i> , 2019, 9, 3918-3926.	1.7	10
63	Piezotronic Effect Enhanced Plasmonic Photocatalysis by AuNPs/BaTiO <sub>3</sub> Heterostructures. <i>Advanced Functional Materials</i> , 2019, 29, 1808737.	7.8	157
64	Enhanced catalytic performance by multi-field coupling in KNbO <sub>3</sub> nanostructures: Piezo-photocatalytic and ferro-photoelectrochemical effects. <i>Nano Energy</i> , 2019, 58, 695-705.	8.2	240
65	Multifunctional Piezoelectric Heterostructure of BaTiO <sub>3</sub> @Graphene: Decomplexation of Cu-EDTA and Recovery of Cu. <i>Environmental Science &amp; Technology</i> , 2019, 53, 8342-8351.	4.6	70
66	1T-phase MoS <sub>2</sub> quantum dots as a superior co-catalyst to Pt decorated on carbon nitride nanorods for photocatalytic hydrogen evolution from water. <i>Materials Chemistry Frontiers</i> , 2019, 3, 2032-2040.	3.2	45
67	Piezotronics enhanced photocatalytic activities of Ag-BaTiO <sub>3</sub> plasmonic photocatalysts. <i>Journal of Alloys and Compounds</i> , 2019, 801, 483-488.	2.8	73
68	Enhancement and mechanism of nano-BaTiO <sub>3</sub> piezocatalytic degradation of tricyclazole by co-loading Pt and RuO <sub>2</sub> . <i>Environmental Science: Nano</i> , 2019, 6, 2241-2252.	2.2	42
69	Enhanced piezo-phototronic effect of ZnO nanorod arrays for harvesting low mechanical energy. <i>Ceramics International</i> , 2019, 45, 15065-15072.	2.3	26
70	Highly Rich 1T Metallic Phase of Few-Layered WS <sub>2</sub> Nanoflowers for Enhanced Storage of Lithium-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 10363-10370.	3.2	35
71	Rapid bacterial disinfection using low frequency piezocatalysis effect. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 77, 355-364.	2.9	61
72	Confining Free Radicals in Close Vicinity to Contaminants Enables Ultrafast Fenton-like Processes in the Interspacing of MoS <sub>2</sub> Membranes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 8134-8138.	7.2	419

#	ARTICLE	IF	CITATIONS
73	Photocatalytic, piezocatalytic, and piezo-photocatalytic effects in ferroelectric (Ba <sub>0.875</sub> Ca <sub>0.125</sub> )(Ti <sub>0.95</sub> Sn <sub>0.05</sub> )O <sub>3</sub> ceramics. <i>Journal of the American Ceramic Society</i> , 2019, 102, 5807-5817.	1.9	54
74	The Decoloration of Anionic and Cationic Dyes Using ZnO and ZnO-Cu <sub>2</sub> O. <i>Crystals</i> , 2019, 9, 229.	1.0	6
75	Confining Free Radicals in Close Vicinity to Contaminants Enables Ultrafast Fenton-like Processes in the Interspacing of MoS <sub>2</sub> Membranes. <i>Angewandte Chemie</i> , 2019, 131, 8218-8222.	1.6	23
76	Hybrid lead-free polymer-based nanocomposites with improved piezoelectric response for biomedical energy-harvesting applications: A review. <i>Nano Energy</i> , 2019, 62, 475-506.	8.2	238
77	High efficient degradation of levofloxacin by edge-selectively Fe@3D-WS <sub>2</sub> : Self-renewing behavior and Degradation mechanism study. <i>Applied Catalysis B: Environmental</i> , 2019, 252, 187-197.	10.8	34
78	Study on water splitting characteristics of CdS nanosheets driven by the coupling effect between photocatalysis and piezoelectricity. <i>Nanoscale</i> , 2019, 11, 9085-9090.	2.8	85
79	Piezoelectric potential induced the improved micro-pollutant dye degradation of Co doped MoS <sub>2</sub> ultrathin nanosheets in dark. <i>Catalysis Communications</i> , 2019, 125, 61-65.	1.6	48
80	Few-layer MoS <sub>2</sub> nanosheet-coated KNbO <sub>3</sub> nanowire heterostructures: piezo-photocatalytic effect enhanced hydrogen production and organic pollutant degradation. <i>Nanoscale</i> , 2019, 11, 7690-7700.	2.8	160
81	Preparation and photocatalytic performance of TiO <sub>2</sub> /PbTiO <sub>3</sub> fiber composite enhanced by external force induced piezoelectric field. <i>Journal of the American Ceramic Society</i> , 2019, 102, 5415-5423.	1.9	27
82	In situ generation and efficient activation of H <sub>2</sub> O <sub>2</sub> for pollutant degradation over CoMoS <sub>2</sub> nanosphere-embedded rGO nanosheets and its interfacial reaction mechanism. <i>Journal of Colloid and Interface Science</i> , 2019, 543, 214-224.	5.0	47
83	The role of microstructure in piezocatalytic degradation of organic dye pollutants in wastewater. <i>Nano Energy</i> , 2019, 59, 372-379.	8.2	154
84	Synthesis of Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> decussated nanoplates with enhanced piezocatalytic activity. <i>Nanoscale</i> , 2019, 11, 21128-21136.	2.8	101
85	Piezoelectric materials for catalytic/photocatalytic removal of pollutants: Recent advances and outlook. <i>Applied Catalysis B: Environmental</i> , 2019, 241, 256-269.	10.8	440
86	Enabling PIEZOpotential in PIEZOelectric Semiconductors for Enhanced Catalytic Activities. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7526-7536.	7.2	234
87	Enabling PIEZOpotential in PIEZOelectric Semiconductors for Enhanced Catalytic Activities. <i>Angewandte Chemie</i> , 2019, 131, 7606-7616.	1.6	28
88	Novel Ag <sub>2</sub> O nanoparticles modified MoS <sub>2</sub> nanoflowers for piezoelectric-assisted full solar spectrum photocatalysis. <i>Journal of Colloid and Interface Science</i> , 2019, 537, 206-214.	5.0	50
89	Synergistically catalytic activities of BiFeO <sub>3</sub> /TiO <sub>2</sub> core-shell nanocomposites for degradation of organic dye molecule through piezophototronic effect. <i>Nano Energy</i> , 2019, 56, 74-81.	8.2	184
90	The fabrication, microstructure, photo-catalysis and piezo-catalysis of layered TiO <sub>2</sub> -MoS <sub>2</sub> . <i>Materials Research Express</i> , 2019, 6, 025025.	0.8	9

#	ARTICLE	IF	CITATIONS
91	Facile strategy for controllable synthesis of hierarchical hollow MoS <sub>2</sub> microspheres with enhanced photocatalytic properties. <i>Journal of Alloys and Compounds</i> , 2019, 784, 330-338.	2.8	16
92	One-step hydrothermal synthesis of high-percentage 1T-phase MoS <sub>2</sub> quantum dots for remarkably enhanced visible-light-driven photocatalytic H <sub>2</sub> evolution. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 76-85.	10.8	137
93	A highly efficient Au-MoS <sub>2</sub> nanocatalyst for tunable piezocatalytic and photocatalytic water disinfection. <i>Nano Energy</i> , 2019, 57, 14-21.	8.2	154
94	The effect of the Cu <sup>+</sup> /Cu <sup>2+</sup> ratio on the redox reactions by nanoflower CuNiO <sub>2</sub> catalysts. <i>Chemical Engineering Science</i> , 2019, 194, 105-115.	1.9	54
95	Enhanced piezoelectric-induced catalysis of SrTiO <sub>3</sub> nanocrystal with well-defined facets under ultrasonic vibration. <i>Ultrasonics Sonochemistry</i> , 2020, 61, 104819.	3.8	105
96	High piezocatalytic activity of ZnO/Al <sub>2</sub> O <sub>3</sub> nanosheets utilizing ultrasonic energy for wastewater treatment. <i>Journal of Cleaner Production</i> , 2020, 242, 118532.	4.6	90
97	Effect of Controlled Oxygen Vacancy on H <sub>2</sub> Production through the Piezocatalysis and Piezophototronics of Ferroelectric R <sub>3</sub> C ZnSnO <sub>3</sub> Nanowires. <i>Advanced Functional Materials</i> , 2020, 30, 1907619.	7.8	142
98	Synthesis of mesoporous C/MoS <sub>2</sub> for adsorption of methyl orange and photo-catalytic sterilization. <i>Applied Surface Science</i> , 2020, 504, 144445.	3.1	28
99	Multi-walled carbon-nanotube-decorated tungsten ditelluride nanostars as anode material for lithium-ion batteries. <i>Nanotechnology</i> , 2020, 31, 035406.	1.3	18
100	Piezo-potential induced molecular oxygen activation of defect-rich MoS <sub>2</sub> ultrathin nanosheets for organic dye degradation in dark. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103626.	3.3	36
101	Dark catalytic degradation of industrial dye effluents using orthorhombic Tin monosulphide nanocatalyst. <i>Journal of Molecular Liquids</i> , 2020, 301, 112360.	2.3	16
102	Morphology/phase-dependent MoS <sub>2</sub> nanostructures for high-efficiency electrochemical activity. <i>Journal of Alloys and Compounds</i> , 2020, 818, 152909.	2.8	20
103	Controllable growth of foxtail-like MoS <sub>2</sub> on one-dimensional carbon nanofibers with enhanced photocatalytic activity. <i>Vacuum</i> , 2020, 172, 109059.	1.6	20
104	Kinetics and mechanisms of enhanced degradation of ibuprofen by piezo-catalytic activation of persulfate. <i>Chemical Engineering Journal</i> , 2020, 392, 123818.	6.6	79
105	Unlocking the high redox activity of MoS <sub>2</sub> on dual-doped graphene as a superior piezocatalyst. <i>Nano Energy</i> , 2020, 68, 104366.	8.2	60
106	Harvesting vibration energy to piezo-catalytically generate hydrogen through Bi <sub>2</sub> WO <sub>6</sub> layered-perovskite. <i>Nano Energy</i> , 2020, 78, 105351.	8.2	99
107	TiO <sub>2</sub> -Templated BaTiO <sub>3</sub> Nanorod as a Piezocatalyst for Generating Wireless Cellular Stress. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 48363-48370.	4.0	31
108	Study on the piezoelectric catalytic degradation dyes performance of three-dimensional bismuth tungstate microflower. <i>Ceramics International</i> , 2020, 46, 29344-29351.	2.3	11

#	ARTICLE	IF	CITATIONS
109	A high performance MoO <sub>3</sub> @MoS <sub>2</sub> porous nanorods for adsorption and photodegradation of dye. Journal of Solid State Chemistry, 2020, 291, 121652.	1.4	30
110	Re-usable self-poled piezoelectric/piezocatalytic films with exceptional energy harvesting and water remediation capability. Nano Energy, 2020, 78, 105339.	8.2	90
111	Piezotronic effect boosted photocatalytic performance of heterostructured BaTiO <sub>3</sub> /TiO <sub>2</sub> nanofibers for degradation of organic pollutants. Nano Energy, 2020, 77, 105122.	8.2	110
112	Simultaneous Piezoelectrocatalytic Hydrogen Evolution and Degradation of Water Pollutants by Quartz Microrods@Few-Layered MoS <sub>2</sub> Hierarchical Heterostructures. Advanced Materials, 2020, 32, e2002875.	11.1	79
113	Surfactant-assisted hydrothermal synthesis of MoS <sub>2</sub> micro-pompon structure with enhanced photocatalytic performance under visible light. Tungsten, 2020, 2, 203-213.	2.0	31
114	Impact of oxygen vacancy occupancy on piezo-catalytic activity of BaTiO <sub>3</sub> nanobelt. Applied Catalysis B: Environmental, 2020, 279, 119340.	10.8	226
115	Piezoelectric field-promoted heterogeneous sono-Fenton performance of MoS <sub>2</sub> /Fe <sub>2</sub> O <sub>3</sub> heterojunction structure. Applied Surface Science, 2020, 534, 147499.	3.1	34
116	Biomimetic Metal-Organic Framework Composite-Mediated Cascade Catalysis for Synergistic Bacteria Killing. ACS Applied Materials & Interfaces, 2020, 12, 36996-37005.	4.0	78
117	Piezoelectric Materials for Controlling Electro-Chemical Processes. Nano-Micro Letters, 2020, 12, 149.	14.4	87
118	Vibration catalysis of eco-friendly Na <sub>0.5</sub> K <sub>0.5</sub> NbO <sub>3</sub> -based piezoelectric: An efficient phase boundary catalyst. Applied Catalysis B: Environmental, 2020, 279, 119353.	10.8	128
119	Effect of Ce on piezo/photocatalytic effects of Ba <sub>0.9</sub> Ca <sub>0.1</sub> Ce <sub>x</sub> Ti <sub>1-x</sub> O <sub>3</sub> ceramics for dye/pharmaceutical waste water treatment. Materials Research Bulletin, 2020, 122, 110647.	2.7	34
120	Coupling Effect of Piezo-Flexocatalytic Hydrogen Evolution with Hybrid 1T and 2H Phase Few-Layered MoSe <sub>2</sub> Nanosheets. Advanced Energy Materials, 2020, 10, 2002082.	10.2	57
121	Piezocatalysis and Piezo-Photocatalysis: Catalysts Classification and Modification Strategy, Reaction Mechanism, and Practical Application. Advanced Functional Materials, 2020, 30, 2005158.	7.8	435
122	100th Anniversary of Macromolecular Science Viewpoint: Piezoelectrically Mediated Mechanochemical Reactions for Adaptive Materials. ACS Macro Letters, 2020, 9, 1237-1248.	2.3	25
123	Hydrothermal synthesis of novel 1-aminoperylene diimide/TiO <sub>2</sub> /MoS <sub>2</sub> composite with enhanced photocatalytic activity. Scientific Reports, 2020, 10, 22005.	1.6	8
124	Fast and Efficient Piezo/Photocatalytic Removal of Methyl Orange Using SbSI Nanowires. Materials, 2020, 13, 4803.	1.3	21
125	Characterization of Catalysts by Advanced Scanning Probe Microscopy and Spectroscopy. ChemCatChem, 2020, 12, 3601-3620.	1.8	4
126	Boosting the piezocatalytic performance of Bi <sub>2</sub> WO <sub>6</sub> nanosheets towards the degradation of organic pollutants. Materials Chemistry Frontiers, 2020, 4, 2096-2102.	3.2	50



#	ARTICLE	IF	CITATIONS
127	Piezopotential-driven simulated electrocatalytic nanosystem of ultrasmall MoC quantum dots encapsulated in ultrathin N-doped graphene vesicles for superhigh H <sub>2</sub> production from pure water. <i>Nano Energy</i> , 2020, 75, 104990.	8.2	64
128	Exclusive enhancement of catalytic activity in Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> nanostructures: new insights into the design of efficient piezocatalysts and piezo-photocatalysts. <i>Journal of Materials Chemistry A</i> , 2020, 8, 16238-16245.	5.2	93
129	Atomically thin ZnS nanosheets: Facile synthesis and superior piezocatalytic H <sub>2</sub> production from pure H <sub>2</sub> O. <i>Applied Catalysis B: Environmental</i> , 2020, 277, 119250.	10.8	124
130	Demonstration of Enhanced Piezo-Catalysis for Hydrogen Generation and Water Treatment at the Ferroelectric Curie Temperature. <i>IScience</i> , 2020, 23, 101095.	1.9	64
131	Rh-Doped SrTiO <sub>3</sub> inverse opal with piezoelectric effect for enhanced visible-light-driven photodegradation of bisphenol A. <i>Environmental Science: Nano</i> , 2020, 7, 2267-2277.	2.2	25
132	Piezobiocatalysis: Ultrasound-Driven Enzymatic Oxyfunctionalization of C-H Bonds. <i>ACS Catalysis</i> , 2020, 10, 5236-5242.	5.5	50
133	Purification of wastewater by the piezo-catalyst effect of PbTiO <sub>3</sub> nanostructures under ultrasonic vibration. <i>Journal of Hazardous Materials</i> , 2020, 394, 122514.	6.5	76
134	BaTiO <sub>3</sub> Nanosheets and Caps Grown on TiO <sub>2</sub> Nanorod Arrays as Thin-Film Catalysts for Piezocatalytic Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 14005-14015.	4.0	50
135	Synthesizing BaTiO <sub>3</sub> Nanostructures to Explore Morphological Influence, Kinetics, and Mechanism of Piezocatalytic Dye Degradation. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 17443-17451.	4.0	128
136	Synergistic effect of Bi-doped exfoliated MoS <sub>2</sub> nanosheets on their bactericidal and dye degradation potential. <i>Dalton Transactions</i> , 2020, 49, 5362-5377.	1.6	52
137	Real time detection of Hg <sup>2+</sup> ions using MoS <sub>2</sub> functionalized AlGaN/GaN high electron mobility transistor for water quality monitoring. <i>Sensors and Actuators B: Chemical</i> , 2020, 309, 127832.	4.0	40
138	Advances in Piezo-Phototronic Effect Enhanced Photocatalysis and Photoelectrocatalysis. <i>Advanced Energy Materials</i> , 2020, 10, 2000214.	10.2	333
139	Enhanced piezo-photocatalytic performance by piezoelectric and visible light photoexcitation coupling through piezoelectric Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> micron crystals. <i>RSC Advances</i> , 2020, 10, 7443-7451.	1.7	56
140	Partial Oxidation Strategy to Synthesize WS <sub>2</sub> /WO <sub>3</sub> Heterostructure with Enhanced Adsorption Performance for Organic Dyes: Synthesis, Modelling, and Mechanism. <i>Nanomaterials</i> , 2020, 10, 278.	1.9	28
141	Recent Advances of Ferro-, Piezo-, and Pyroelectric Nanomaterials for Catalytic Applications. <i>ACS Applied Nano Materials</i> , 2020, 3, 1063-1079.	2.4	205
142	Ultrasensitive Paper-Based Photoelectrochemical Sensing Platform Enabled by the Polar Charge Carriers-Created Electric Field. <i>Analytical Chemistry</i> , 2020, 92, 2902-2906.	3.2	38
143	A tribo-positive Fe@MoS <sub>2</sub> piezocatalyst for the durable degradation of tetracycline: degradation mechanism and toxicity assessment. <i>Environmental Science: Nano</i> , 2020, 7, 1704-1718.	2.2	47
144	Water flow driven piezo-photocatalytic flexible films: Bi-piezoelectric integration of ZnO nanorods and PVDF. <i>Applied Surface Science</i> , 2020, 517, 146119.	3.1	62

#	ARTICLE	IF	CITATIONS
145	Effect of Bi <sub>2</sub> WO <sub>6</sub> nanosheets on the ultrasonic degradation of organic dyes: Roles of adsorption and piezocatalysis. <i>Journal of Cleaner Production</i> , 2020, 261, 121125.	4.6	109
146	A novel one-pot strategy for fabrication of PEGylated MoS <sub>2</sub> composites for pH responsive controlled drug delivery. <i>Journal of Molecular Liquids</i> , 2020, 307, 112962.	2.3	4
147	Dye degradation and bacterial disinfection using multicyclic BaZr <sub>0.02</sub> Ti <sub>0.98</sub> O <sub>3</sub> ceramics. <i>Journal of the American Ceramic Society</i> , 2020, 103, 4774-4784.	1.9	61
148	Sonochemical fabrication of inorganic nanoparticles for applications in catalysis. <i>Ultrasonics Sonochemistry</i> , 2021, 71, 105384.	3.8	58
149	Effect of poling on piezocatalytic removal of multi-pollutants using BaTiO <sub>3</sub> . <i>Journal of the American Ceramic Society</i> , 2021, 104, 1661-1668.	1.9	25
150	Local hot charge density regulation: Vibration-free piezoelectric nanogenerator for effectively enhancing catalysis and in-situ surface enhanced Raman scattering monitoring. <i>Nano Energy</i> , 2021, 81, 105585.	8.2	154
151	Separable magnetic MoS <sub>2</sub> @Fe <sub>3</sub> O <sub>4</sub> nanocomposites with multi-exposed active edge facets toward enhanced adsorption and catalytic activities. <i>Journal of Materials Science</i> , 2021, 56, 5015-5030.	1.7	10
152	Confinement Aided Simultaneous Water Cleaning and Energy Harvesting Using Atomically Thin Wurtzite (Wurtzite). <i>Advanced Sustainable Systems</i> , 2021, 5, 2000189.	2.7	4
153	Piezocatalytic Foam for Highly Efficient Degradation of Aqueous Organics. <i>Small Science</i> , 2021, 1, 2000011.	5.8	32
154	Efficiently harvesting the ultrasonic vibration energy of two-dimensional graphitic carbon nitride for piezocatalytic degradation of dichlorophenols. <i>Environmental Science: Nano</i> , 2021, 8, 1398-1407.	2.2	42
155	Turbulence enhanced ferroelectric-nanocrystal-based photocatalysis in urchin-like TiO <sub>2</sub> /BaTiO <sub>3</sub> microspheres for hydrogen evolution. <i>Nanoscale Advances</i> , 2021, 3, 5618-5625.	2.2	11
156	Monoclinic dibismuth tetraoxide (Bi <sub>2</sub> O <sub>4</sub> ) for piezocatalysis: new use for neglected materials. <i>Chemical Communications</i> , 2021, 57, 2740-2743.	2.2	11
157	A reduced graphene oxide/bismuth vanadate composite as an efficient piezocatalyst for degradation of organic dye. <i>Materials Advances</i> , 2021, 2, 4093-4101.	2.6	18
158	Piezoelectric activation of peroxydisulfate by MoS <sub>2</sub> nanoflowers for the enhanced degradation of aqueous organic pollutants. <i>Environmental Science: Nano</i> , 2021, 8, 784-794.	2.2	57
159	Emerging Energy Harvesting Technology for Electro/Photo-Catalytic Water Splitting Application. <i>Catalysts</i> , 2021, 11, 142.	1.6	24
160	Reduction of CO <sub>2</sub> by TiO <sub>2</sub> nanoparticles through friction in water. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2021, 70, 214601.	0.2	9
161	Preparation and piezoelectric catalytic performance of flexible inorganic Ba <sub>1-x</sub> Ca <sub>x</sub> TiO <sub>3</sub> electrospinning. <i>Journal of Materials Chemistry A</i> , 2021, 9, 24695-24703.	5.2	18
162	Enhanced Piezocatalytic Activity of Sr <sub>0.5</sub> Ba <sub>0.5</sub> Nb <sub>2</sub> O <sub>6</sub> Nanostructures by Engineering Surface Oxygen Vacancies and Self-Generated Heterojunctions. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 7259-7267.	4.0	45

#	ARTICLE	IF	CITATIONS
163	Hydrogen Generation and Degradation of Organic Dyes by New Piezocatalytic $0.7\text{BiFeO}_3/0.3\text{BaTiO}_3$ Nanoparticles with Proper Band Alignment. ACS Applied Materials & Interfaces, 2021, 13, 11050-11057.	4.0	48
164	Cocatalyst Engineering in Piezocatalysis: A Promising Strategy for Boosting Hydrogen Evolution. ACS Applied Materials & Interfaces, 2021, 13, 15305-15314.	4.0	68
165	Flammable gases produced by $\text{TiO}_2$ nanoparticles under magnetic stirring in water. Friction, 2022, 10, 1127-1133.	3.4	23
166	Oxalic acid functionalization of $\text{BaTiO}_3$ nanobelts for promoting their piezo-degradation organic contaminants. Journal of Materiomics, 2021, 7, 1275-1283.	2.8	11
167	Advances in piezotronic transistors and piezotronics. Nano Today, 2021, 37, 101108.	6.2	48
168	A discovery of field-controlling selective adsorption for micro $\text{ZnO}$ rods with unexpected piezoelectric catalytic performance. Applied Surface Science, 2021, 545, 149032.	3.1	23
169	Piezoelectric nanocomposites for sonodynamic bacterial elimination and wound healing. Nano Today, 2021, 37, 101104.	6.2	164
170	Energy harvesting using piezoelectric cementitious composites for water cleaning applications. Materials Research Bulletin, 2021, 137, 111205.	2.7	24
171	$\text{BaTiO}_3$ nanocubes/cuboids with selectively deposited Ag nanoparticles: Efficient piezocatalytic degradation and mechanism. Applied Catalysis B: Environmental, 2021, 285, 119823.	10.8	99
172	Piezotronic effect and oxygen vacancies boosted photocatalysis $\text{C}^{\text{N}}$ coupling of benzylamine. Nano Energy, 2021, 83, 105831.	8.2	45
173	Surface plasmon resonance-induced $\text{Ag}/\text{BaTiO}_3$ composites for catalytic performance. Journal of the American Ceramic Society, 2021, 104, 4389-4397.	1.9	16
174	Exceptional Cocatalyst-Free Photo-Enhanced Piezocatalytic Hydrogen Evolution of Carbon Nitride Nanosheets from Strong In-Plane Polarization. Advanced Materials, 2021, 33, e2101751.	11.1	272
175	Piezoelectricity catalyzed ROS generation of $\text{MoS}_2$ only by aeration for wastewater purification. Research on Chemical Intermediates, 2021, 47, 4763.	1.3	7
176	Highly efficient sono-piezo-photo synergistic catalysis in bismuth layered ferroelectrics via finely distinguishing sonochemical and electromechanochemical processes. Journal of Materiomics, 2022, 8, 47-58.	2.8	13
177	Strain-Engineered Nano-Ferroelectrics for High-Efficiency Piezocatalytic Overall Water Splitting. Angewandte Chemie - International Edition, 2021, 60, 16019-16026.	7.2	96
178	Strain-Engineered Nano-Ferroelectrics for High-Efficiency Piezocatalytic Overall Water Splitting. Angewandte Chemie, 2021, 133, 16155-16162.	1.6	16
179	Ultrasmall Barium Titanate Nanoparticles for Highly Efficient Hypoxic Tumor Therapy via Ultrasound Triggered Piezocatalysis and Water Splitting. ACS Nano, 2021, 15, 11326-11340.	7.3	90
180	Ultrasonic activation of inert poly(tetrafluoroethylene) enables piezocatalytic generation of reactive oxygen species. Nature Communications, 2021, 12, 3508.	5.8	153

#	ARTICLE	IF	CITATIONS
181	The influence of piezoelectric effect on the heterogeneous photocatalytic hydrogen production of strontium titanate nanoparticles. <i>Nano Energy</i> , 2021, 85, 105949.	8.2	52
182	Fabrication of PVDF-based piezocatalytic active membrane with enhanced oxytetracycline degradation efficiency through embedding few-layer E-MoS <sub>2</sub> nanosheets. <i>Chemical Engineering Journal</i> , 2021, 415, 129000.	6.6	78
183	Construction of MoS <sub>2</sub> /ZnO heterostructures as highly efficient photocatalysts for enhanced visible-light decomposition of methylene blue and hydrogen evolution. <i>Materials Chemistry and Physics</i> , 2021, 266, 124560.	2.0	31
184	Highly-efficient piezocatalytic performance of nanocrystalline BaTi <sub>0.89</sub> Sn <sub>0.11</sub> O <sub>3</sub> catalyst with T <sub>c</sub> near room temperature. <i>Nano Energy</i> , 2021, 85, 106028.	8.2	56
185	Ultrahigh degradation efficiency of AB type in-plane reverse polarization WS <sub>2</sub> nano sheets in dark by piezo-catalyst effect. <i>Applied Surface Science</i> , 2021, 553, 149557.	3.1	13
186	Ultrahigh piezocatalytic capability in eco-friendly BaTiO <sub>3</sub> nanosheets promoted by 2D morphology engineering. <i>Journal of Colloid and Interface Science</i> , 2021, 596, 288-296.	5.0	77
187	Efficient piezocatalytic removal of BPA and Cr(VI) with SnS <sub>2</sub> /CNFs membrane by harvesting vibration energy. <i>Nano Energy</i> , 2021, 86, 106036.	8.2	74
188	Boosting Piezo/Photo-Induced Charge Transfer of CNT/Bi <sub>4</sub> O <sub>5</sub> I <sub>2</sub> Catalyst for Efficient Ultrasound-Assisted Degradation of Rhodamine B. <i>Materials</i> , 2021, 14, 4449.	1.3	9
189	Synergetic effect of piezoelectricity and Ag deposition on photocatalytic performance of barium titanate perovskite. <i>Solar Energy</i> , 2021, 224, 455-461.	2.9	22
190	Piezocatalytic degradation of pollutants in water: Importance of catalyst size, poling and excitation mode. <i>Chemical Engineering Journal Advances</i> , 2021, 7, 100133.	2.4	25
191	Synergetic piezo-photocatalytic effect in a Bi <sub>2</sub> MoO <sub>6</sub> /BiOBr composite for decomposing organic pollutants. <i>Applied Surface Science</i> , 2021, 560, 150037.	3.1	71
192	Carbon dots mediated charge sinking effect for boosting hydrogen evolution in Cu-In-Zn-S QDs/MoS <sub>2</sub> photocatalysts. <i>Applied Catalysis B: Environmental</i> , 2022, 301, 120755.	10.8	63
193	Preparation and piezoelectric catalytic performance of HT-Bi <sub>2</sub> MoO <sub>6</sub> microspheres for dye degradation. <i>Advanced Powder Technology</i> , 2021, 32, 3346-3354.	2.0	46
194	Synthesis of flexible BaTiO <sub>3</sub> nanofibers for efficient vibration-driven piezocatalysis. <i>Ceramics International</i> , 2021, 47, 25416-25424.	2.3	18
195	Advances of piezoelectric nanomaterials for applications in advanced oxidation technologies. <i>Current Opinion in Chemical Engineering</i> , 2021, 33, 100693.	3.8	49
196	Localized surface plasmon resonance coupling with piezophototronic effect for enhancing hydrogen evolution reaction with Au@MoS <sub>2</sub> nanoflowers. <i>Nano Energy</i> , 2021, 87, 106131.	8.2	52
197	Strain-Induced Ferroelectric Heterostructure Catalysts of Hydrogen Production through Piezophototronic and Piezoelectrocatalytic System. <i>ACS Nano</i> , 2021, 15, 16106-16117.	7.3	41
198	Hierarchically structured Bi <sub>2</sub> Mo <sub>x</sub> W <sub>1-x</sub> O <sub>6</sub> solid solutions with enhanced piezocatalytic activities. <i>Ceramics International</i> , 2022, 48, 837-846.	2.3	6

#	ARTICLE	IF	CITATIONS
199	Role of driven approach on the piezoelectric ozonation processes: Comparing ultrasound with hydro-energy as driving forces. <i>Journal of Hazardous Materials</i> , 2021, 418, 126392.	6.5	13
200	Enhanced electrocatalytic hydrogen evolution performance of 2D few-layer WS <sub>2</sub> nanosheets via piezoelectric effects. <i>Inorganic Chemistry Communication</i> , 2021, 132, 108822.	1.8	5
201	Directionally tailoring the macroscopic polarization of piezocatalysis for hollow zinc sulfide on dual-doped graphene. <i>Nano Energy</i> , 2021, 88, 106312.	8.2	18
202	Enhanced photocatalytic performance of ferroelectric-based SrBi <sub>4</sub> Ti <sub>4</sub> O <sub>15</sub> /SnS <sub>2</sub> hybrids by piezoelectric effect. <i>Journal of Alloys and Compounds</i> , 2021, 883, 160743.	2.8	21
203	Construction of a photocatalytic fuel cell using a novel Z-scheme MoS <sub>2</sub> /rGO/Bi <sub>2</sub> S <sub>3</sub> as electrode degraded antibiotic wastewater. <i>Separation and Purification Technology</i> , 2021, 277, 119276.	3.9	9
204	The ultrasonic-induced-piezoelectric enhanced photocatalytic performance of ZnO/CdS nanofibers for degradation of bisphenol A. <i>Journal of Alloys and Compounds</i> , 2021, 885, 160987.	2.8	37
205	Enhanced piezocatalysis of polymorphic few-layered MoS <sub>2</sub> nanosheets by phase engineering. <i>Nano Energy</i> , 2021, 90, 106527.	8.2	52
206	The design of an inner-motile waste-energy-driven piezoelectric catalytic system. <i>New Journal of Chemistry</i> , 2021, 45, 7671-7681.	1.4	2
207	Energy and environmental catalysis driven by stress and temperature-variation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12400-12432.	5.2	44
208	Reactive Oxygenated Species Generated on Iodide-doped BiVO <sub>4</sub> /BaTiO <sub>3</sub> Heterostructures with Ag/Cu Nanoparticles by Coupled Piezophototronic Effect and Plasmonic Excitation. <i>Advanced Functional Materials</i> , 2021, 31, 2009594.	7.8	80
209	Vibration energy harvesting for degradation of dye and bacterial cells using cement-based Ba <sub>0.85</sub> Ca <sub>0.15</sub> Zr <sub>0.1</sub> Ti <sub>0.9</sub> O <sub>3</sub> composites. <i>Materials Today Communications</i> , 2020, 25, 101592.	0.9	13
210	Piezo-Photocatalytic Reduction of Au(I) by Defect-Rich MoS <sub>2</sub> Nanoflowers for Efficient Gold Recovery from a Thiosulfate Solution. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 589-598.	3.2	34
211	Ultrasensitive Detection of Mercury Ions Under UV Illumination of MoS <sub>2</sub> Functionalized AlGa <sub>N</sub> /Ga <sub>N</sub> Transistor. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 5693-5700.	1.6	8
212	Enhancement of piezoelectric catalysis of Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> with electric poling for dye decomposition. <i>Ceramics International</i> , 2022, 48, 3695-3701.	2.3	31
213	The Mechanism of Piezocatalysis: Energy Band Theory or Screening Charge Effect?. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202110429.	7.2	79
214	MoSe <sub>2</sub> Nanoflowers for Highly Efficient Industrial Wastewater Treatment with Zero Discharge. <i>Advanced Science</i> , 2021, 8, e2102857.	5.6	16
215	The Mechanism of Piezocatalysis: Energy Band Theory or Screening Charge Effect?. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	34
216	Self-powered photoelectrochemical quartz/TiO <sub>2</sub> microsystem through piezopotential sensitized photocatalytic process. <i>Nano Energy</i> , 2022, 91, 106640.	8.2	18

#	ARTICLE	IF	CITATIONS
217	2D Piezoelectric Bi <sub>2</sub> MoO <sub>6</sub> Nanoribbons for GSH-Enhanced Sonodynamic Therapy. <i>Advanced Materials</i> , 2021, 33, e2106838.	11.1	180
218	Enhancement of the conversion of mechanical energy into chemical energy by using piezoelectric KNbO <sub>3</sub> with oxygen vacancies as a novel piezocatalyst. <i>Nano Express</i> , 2020, 1, 030036.	1.2	6
219	Research progress and prospects of photocatalytic devices with perovskite ferroelectric semiconductors. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2020, 69, 127706.	0.2	5
220	Recent advances, challenges, and prospects of piezoelectric materials for self-charging supercapacitor. <i>Journal of Energy Storage</i> , 2022, 47, 103547.	3.9	23
221	Syntheses of flower and tube-like MoSe <sub>2</sub> nanostructures for ultrafast piezocatalytic degradation of organic dyes on cotton fabrics. <i>Journal of Hazardous Materials</i> , 2022, 424, 127702.	6.5	29
222	Unexpected exfoliation and activity of nano poly(tetrafluoroethylene) particles from magnetic stir bars: Discovery and implication. <i>Chemosphere</i> , 2022, 291, 132797.	4.2	6
223	MoS <sub>2</sub> -nanoflower enhanced programmable adsorption/desorption plasmonic detection for bipolar-molecules with high sensitivity. <i>Biosensors and Bioelectronics</i> , 2022, 198, 113787.	5.3	10
224	Free layer-dependent piezoelectricity of oxygen-doped MoS <sub>2</sub> for the enhanced piezocatalytic hydrogen evolution from pure water. <i>Applied Surface Science</i> , 2022, 576, 151851.	3.1	31
225	Ultrasound-Responsive Systems as Components for Smart Materials. <i>Chemical Reviews</i> , 2022, 122, 5165-5208.	23.0	89
226	Enhanced piezoelectric and photocatalytic performance of flexible energy harvester based on CsZn <sub>0.75</sub> Pb <sub>0.25</sub> I <sub>3</sub> /CNCA/PVDF composite nanofibers. <i>Chemical Engineering Journal</i> , 2022, 433, 133620.	6.6	59
227	High piezocatalytic capability in CuS/MoS <sub>2</sub> nanocomposites using mechanical energy for degrading pollutants. <i>Journal of Colloid and Interface Science</i> , 2022, 609, 657-666.	5.0	35
228	Self-Powered Water Flow-Triggered Piezocatalytic Generation of Reactive Oxygen Species for Water Purification in Simulated Water Drainage. <i>ACS ES&amp;T Engineering</i> , 2022, 2, 101-109.	3.7	40
229	Protrudent Iron Single-Atom Accelerated Interfacial Piezoelectric Polarization for Self-Powered Water Motion Triggered Fenton-Like Reaction. <i>Small</i> , 2022, 18, e2105279.	5.2	58
230	Piezoelectric A <sub>15</sub> B <sub>16</sub> C <sub>17</sub> Compounds and Their Nanocomposites for Energy Harvesting and Sensors: A Review. <i>Materials</i> , 2021, 14, 6973.	1.3	5
231	Separable Magnetic Fe <sub>3</sub> O <sub>4</sub> @MoS <sub>2</sub> Composite for Adsorption and Piezo-Catalytic Degradation of Dye. <i>Catalysts</i> , 2021, 11, 1403.	1.6	10
232	Efficient piezocatalytic H <sub>2</sub> O <sub>2</sub> production of atomic-level thickness Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> nanosheets with surface oxygen vacancy. <i>Chemical Engineering Journal</i> , 2022, 431, 133930.	6.6	27
233	Large-scale synthetic Mo@(2H-1T)-MoSe <sub>2</sub> monolithic electrode for efficient hydrogen evolution in all pH scale ranges and seawater. <i>Applied Catalysis B: Environmental</i> , 2022, 304, 120993.	10.8	54
234	Efficient purification of wastewater by applying mechanical force and BaCO <sub>3</sub> /TiO <sub>2</sub> and BaTiO <sub>3</sub> /TiO <sub>2</sub> piezocatalysts. <i>RSC Advances</i> , 2021, 11, 37138-37149.	1.7	5

#	ARTICLE	IF	CITATIONS
235	Improvement of sewage sludge dewatering by piezoelectric effect driven directly with pressure from pressure filtration: Towards understanding piezo-dewatering mechanism. <i>Water Research</i> , 2022, 209, 117922.	5.3	11
236	Hydrophilic porous PVDF membrane embedded with BaTiO <sub>3</sub> featuring controlled oxygen vacancies for piezocatalytic water cleaning. <i>Nano Energy</i> , 2022, 94, 106930.	8.2	74
237	Piezoelectric Disinfection of Water Co-Polluted by Bacteria and Microplastics Energized by Water Flow. <i>ACS ES&amp;T Water</i> , 2022, 2, 367-375.	2.3	21
238	Boosting and regulating solar energy conversion performance of delafossite AgFeO <sub>2</sub> by spin polarization. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4800-4816.	5.2	6
239	Atomic-Scale Understanding of Li Storage Processes in the Ti <sub>4</sub> C <sub>3</sub> and Chemically Ordered Ti <sub>2</sub> Ta <sub>2</sub> C <sub>3</sub> MXenes: A Theoretical and Experimental Assessment. <i>ACS Applied Energy Materials</i> , 2022, 5, 1801-1809.	2.5	14
240	Piezoelectric nanofoams with the interlaced ultrathin graphene confining Zn <sup>2+</sup> -C dipoles for efficient piezocatalytic H <sub>2</sub> evolution under low-frequency vibration. <i>Journal of Energy Chemistry</i> , 2022, 69, 115-122.	7.1	11
241	Ultrahigh-permeance functionalized boron nitride membrane for nanoconfined heterogeneous catalysis. <i>Chem Catalysis</i> , 2022, 2, 550-562.	2.9	23
242	Piezocatalytic and doping effects synergistically enhance the oxygen evolution in Sb-doped zinc oxide nanorod arrays as a photoanode for photoelectrochemical water splitting. <i>MRS Energy &amp; Sustainability</i> , 2022, 9, 19-27.	1.3	1
243	Engineering the Defects and Microstructures in Ferroelectrics for Enhanced/Novel Properties: An Emerging Way to Cope with Energy Crisis and Environmental Pollution. <i>Advanced Science</i> , 2022, 9, e2105368.	5.6	46
244	Built-in electric field enhanced BiFeO <sub>3</sub> photo-Fenton degradation Rhodamine B solution. <i>Journal of Materials Science</i> , 2022, 57, 6900-6913.	1.7	5
245	Enhanced utilization efficiency of peroxymonosulfate via water vortex-driven piezo-activation for removing organic contaminants from water. <i>Environmental Science and Ecotechnology</i> , 2022, 10, 100165.	6.7	49
246	2D Molybdenum Sulfide-Based Materials for Photo-Excited Antibacterial Application. <i>Advanced Healthcare Materials</i> , 2022, 11, e2200360.	3.9	24
247	Efficient Catalytic Elimination of CH <sub>3</sub> SH by a Wet-Piezotronics System over Ag Cluster-Deposited BaTiO <sub>3</sub> with Electronic Metal-Support Interaction. <i>ACS ES&amp;T Engineering</i> , 2022, 2, 1179-1187.	3.7	10
248	Excellent piezo-photocatalytic performance of Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> nanoplates synthesized by molten-salt method. <i>Nano Energy</i> , 2022, 98, 107247.	8.2	49
249	(1-x)Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> -xBiFeO <sub>3</sub> solid solutions with enhanced piezocatalytic dye degradation. <i>Separation and Purification Technology</i> , 2022, 290, 120831.	3.9	26
250	Lattice origin of few-layer edge-on MoS <sub>2</sub> @TiO <sub>2</sub> octahedral clusters for piezoelectric enhancement. <i>Applied Surface Science</i> , 2022, 588, 152942.	3.1	8
251	Transient photovoltage study of the kinetics and synergy of electron/hole co-extraction in MoS <sub>2</sub> /Ag-In-Zn-S/carbon dot photocatalysts for promoted hydrogen production. <i>Chemical Engineering Journal</i> , 2022, 439, 135759.	6.6	20
252	Piezocatalytic oxidation of 5-hydroxymethylfurfural to 5-formyl-2-furancarboxylic acid over Pt decorated hydroxyapatite. <i>Applied Catalysis B: Environmental</i> , 2022, 309, 121281.	10.8	23

#	ARTICLE	IF	CITATIONS
253	Highly efficient uranium extraction by a piezo catalytic reduction-oxidation process. Applied Catalysis B: Environmental, 2022, 310, 121343.	10.8	72
254	Piezo-enhanced charge carrier separation over plasmonic Au-BiOBr for piezo-photocatalytic carbamazepine removal. Applied Catalysis B: Environmental, 2022, 311, 121369.	10.8	57
255	Piezo-promoted regeneration of Fe <sup>2+</sup> boosts peroxydisulfate activation by Bi <sub>2</sub> Fe <sub>4</sub> O <sub>9</sub> nanosheets. Applied Catalysis B: Environmental, 2022, 310, 121330.	10.8	45
256	Sustainable micro-activation of dissolved oxygen driving pollutant conversion on Mo-enhanced zinc sulfide surface in natural conditions. Fundamental Research, 2023, 3, 422-429.	1.6	7
257	Enhanced charge separation in La <sub>2</sub> Ni <sub>4</sub> nanoplates by coupled piezocatalysis and photocatalysis for efficient H <sub>2</sub> evolution. Nanoscale, 2022, 14, 7083-7095.	2.8	16
258	Co <sub>4</sub> W composite for efficient piezocatalytic hydrogen evolution. Dalton Transactions, 2022, 51, 7127-7134.	1.6	9
259	Three dimensional BaTiO <sub>3</sub> piezoelectric ceramics coated with TiO <sub>2</sub> nanoarray for high performance of piezo-photoelectric catalysis. Nano Energy, 2022, 98, 107267.	8.2	25
260	High-efficiency cycling piezo-degradation of organic pollutants over three liters using MoS <sub>2</sub> /carbon fiber piezocatalytic filter. Nano Energy, 2022, 98, 107280.	8.2	34
261	Vacancy Engineering in Ws <sub>2</sub> Nanosheets for Enhanced Potassium-ion Storage. SSRN Electronic Journal, 0, , .	0.4	0
262	Ti <sub>3</sub> C <sub>2</sub> Mxene with Out-of-Plane Electromechanical Response as Substrate of Molybdenum Disulfide for Enhanced Piezocatalysis. SSRN Electronic Journal, 0, , .	0.4	0
263	Piezo-assisted photoelectric catalysis degradation for dyes and antibiotics by Ag dots-modified NaNbO <sub>3</sub> powders. Ceramics International, 2022, 48, 23182-23194.	2.3	23
264	Update of ultrasound-assembling fabrication and biomedical applications for heterogeneous polymer composites. Advances in Colloid and Interface Science, 2022, 305, 102683.	7.0	7
265	Modulating polarization rotation to stimulate the high piezocatalytic activity of (K, Na)NbO <sub>3</sub> lead-free piezoelectric materials. Applied Catalysis B: Environmental, 2022, 313, 121471.	10.8	30
266	Direct Z-scheme MoSe <sub>2</sub> /TiO <sub>2</sub> heterostructure with improved piezoelectric and piezo-photocatalytic performance. Journal of Colloid and Interface Science, 2022, 622, 637-651.	5.0	15
267	Development of High Percentage 1t Phase Mose <sub>2</sub> Nanosheet and its Remarkable Piezocatalytic Activity Over Rhb Removal and Cr (Vi) Reduction. SSRN Electronic Journal, 0, , .	0.4	0
268	Enhanced charge carrier separation by bi-piezoelectric effects based on pine needle-like BaTiO <sub>3</sub> /ZnO continuous nanofibers. Journal of Materials Chemistry A, 2022, 10, 13544-13555.	5.2	26
269	Piezo-Electrocatalysis for CO <sub>2</sub> Reduction Driven by Vibration. Advanced Energy Materials, 2022, 12, .	10.2	55
270	New insight to piezocatalytic peroxymonosulfate activation: The critical role of dissolved oxygen in mediating radical and nonradical pathways. Applied Catalysis B: Environmental, 2022, 315, 121584.	10.8	43



#	ARTICLE	IF	CITATIONS
271	Effective treatment of cisplatin-resistant ovarian tumors with a MoS <sub>2</sub> -based sonosensitizer and nanoenzyme capable of reversing the resistant-microenvironment and enhancing ferroptosis and apoptosis. <i>Chemical Engineering Journal</i> , 2022, 446, 137040.	6.6	22
272	Piezoelectric Semiconductor Nanomaterials in Sonodynamic Therapy: a Review. Wuji Cailiao Xuebao/ <i>Journal of Inorganic Materials</i> , 2022, 37, 1170.	0.6	2
273	Oxygen vacancy-induced hydroxyl dipole reorientation in hydroxyapatite for enhanced piezocatalytic activity. <i>Nano Energy</i> , 2022, 100, 107473.	8.2	28
274	Enhanced Piezocatalysis by Calcium Phosphate Nanowires via Gold Nanoparticle Conjugation. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 26443-26454.	4.0	18
275	Ti <sub>3</sub> C <sub>2</sub> quantum dots modified on BiOBr surface for sewage disposal: The induction of the piezo-phototronic effect from edge to whole. <i>Applied Surface Science</i> , 2022, 599, 153911.	3.1	13
276	Symmetry-breaking induced piezocatalysis of Bi <sub>2</sub> S <sub>3</sub> nanorods and boosted by alternating magnetic field. <i>Applied Catalysis B: Environmental</i> , 2022, 316, 121664.	10.8	48
277	Unveiling the Mechanism of Frictional Catalysis in Water by Bi <sub>12</sub> TiO <sub>20</sub> : Charge Transfer and Contaminant Decomposition Path. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
278	Low Consumption Fenton-Like Water Purification Through Pollutants as Electron Donors Substituting H <sub>2</sub> O <sub>2</sub> Consumption Via Twofold Cation- $\Gamma$ Over MoS <sub>2</sub> Cross-Linking G-C <sub>3</sub> N <sub>4</sub> Hybrid. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
279	Piezo-enhanced photocatalytic performance of ZnO nanorod array for pollutants degradation in dynamic water: Insight into the effect of velocity and inner flow field. <i>Nano Energy</i> , 2022, 101, 107614.	8.2	49
280	Local dipole enhancement of space-charge piezophototronic catalysts of core-shell polytetrafluoroethylene@TiO <sub>2</sub> nanospheres. <i>Nano Energy</i> , 2022, 102, 107619.	8.2	16
281	Robust route to H <sub>2</sub> O <sub>2</sub> and H <sub>2</sub> via intermediate water splitting enabled by capitalizing on minimum vanadium-doped piezocatalysts. <i>Nano Research</i> , 2022, 15, 7986-7993.	5.8	24
282	Thin Films (FTO/BaTiO <sub>3</sub> /AgNPs) for Enhanced Piezo-Photocatalytic Degradation of Methylene Blue and Ciprofloxacin in Wastewater. <i>ACS Omega</i> , 2022, 7, 24329-24343.	1.6	19
283	Vacancy engineering in WS <sub>2</sub> nanosheets for enhanced potassium-ion storage. <i>Journal of Power Sources</i> , 2022, 542, 231791.	4.0	6
284	Thickness-dependent piezo-photo-responsive behavior of ZnAl-layered double hydroxide for wastewater remediation. <i>Nano Energy</i> , 2022, 101, 107583.	8.2	18
285	Systematic investigation of the piezocatalysis-adsorption duality of polymorphic MoS <sub>2</sub> nanoflowers. <i>Applied Catalysis B: Environmental</i> , 2022, 317, 121717.	10.8	35
286	Efficient piezo-catalytic oxidation of aqueous As(III) over crystalline carbon nitride poly(heptazine) Tj ETQq1 1 0.784314 rgBT/Overlook	6.6	12
287	A dual optimization approach for photoreduction of CO <sub>2</sub> to alcohol in g-C <sub>3</sub> N <sub>4</sub> /BaTiO <sub>3</sub> system: Heterojunction construction and ferroelectric polarization. <i>Applied Surface Science</i> , 2022, 602, 154310.	3.1	11
288	Low consumption Fenton-like water purification through pollutants as electron donors substituting H <sub>2</sub> O <sub>2</sub> consumption via twofold cation- $\Gamma$ over MoS <sub>2</sub> cross-linking g-C <sub>3</sub> N <sub>4</sub> hybrid. <i>Applied Catalysis B: Environmental</i> , 2023, 320, 121871.	10.8	23

#	ARTICLE	IF	CITATIONS
289	Titanium carbide MXene with out-of-plane electromechanical response as substrate of molybdenum disulfide for enhanced piezocatalysis. <i>Journal of Alloys and Compounds</i> , 2022, 925, 166638.	2.8	3
290	Mechanism of interface engineering for ultrahigh piezo-photoelectric catalytic coupling effect of BaTiO <sub>3</sub> @TiO <sub>2</sub> microflowers. <i>Applied Catalysis B: Environmental</i> , 2022, 318, 121817.	10.8	29
291	Plasmonic enhanced piezoelectric photocatalytic performance with PVDF@BT/MoS <sub>2</sub> /Au by strong piezoelectric functional particle doping. <i>Journal of Alloys and Compounds</i> , 2022, 925, 166695.	2.8	12
292	Competing contributions to the catalytic activity of barium titanate nanoparticles in the decomposition of organic pollutants. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108571.	3.3	8
293	Insights into highly efficient piezocatalytic molecule oxygen activation over Bi <sub>2</sub> Fe <sub>4</sub> O <sub>9</sub> : Active sites and mechanism. <i>Chemical Engineering Journal</i> , 2023, 452, 139300.	6.6	19
294	Piezoelectric catalytic performance of BaTiO <sub>3</sub> for sulfamethoxazole degradation. <i>Environmental Science: Water Research and Technology</i> , 2022, 8, 3007-3018.	1.2	5
295	Dual-Defect Enhanced Piezocatalytic Performance of C <sub>3</sub> N <sub>5</sub> for Multifunctional Applications. <i>SSRN Electronic Journal</i> , 0, .	0.4	0
296	CdS nanocages@defective-CoNi-LDH with bilayer porous hollow frameworks toward optimized sono-photocatalytic performance. <i>Journal of Materials Chemistry A</i> , 2022, 10, 16439-16447.	5.2	14
297	Morphology-controlled synthesis of MoS <sub>2</sub> using citric acid as a complexing agent and self-assembly inducer for high electrochemical performance. <i>RSC Advances</i> , 2022, 12, 28463-28472.	1.7	7
298	Piezoelectric-enhanced photocatalytic performance of porous carbon nitride nanosheets. <i>Journal of Colloid and Interface Science</i> , 2023, 630, 191-203.	5.0	15
299	Synthesis and characterization of surfactant assisted MoS <sub>2</sub> for degradation of industrial pollutants. <i>Optical Materials</i> , 2022, 133, 113033.	1.7	6
300	Piezocatalytic Techniques in Environmental Remediation. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0
301	High efficiently harvesting visible light and vibration energy in (1-x)AgNbO <sub>3</sub> -xLiTaO <sub>3</sub> solid solution around antiferroelectric-ferroelectric phase boundary for dye degradation. <i>Journal of Advanced Ceramics</i> , 2022, 11, 1641-1653.	8.9	25
302	Selective Enhancement of Photo-Piezocatalytic Performance in BaTiO <sub>3</sub> Via heterovalent Ion Doping. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	57
303	Piezocatalytic Techniques in Environmental Remediation. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	33
304	Roadmap on nanogenerators and piezotronics. <i>APL Materials</i> , 2022, 10, .	2.2	22
305	Efficient Charge Separation via MoSe <sub>2</sub> Nanosheets with Tunable 1T Phase Contents: Piezoreduction of Cr(VI) to Cr(III) and Piezodegradation of RhB. <i>Inorganic Chemistry</i> , 2022, 61, 17972-17984.	1.9	9
306	Sulfur ligated oxoiron(IV) centre in fenton-like reaction: Theoretical postulation and experimental verification. <i>Catalysis Communications</i> , 2022, 172, 106536.	1.6	1

#	ARTICLE	IF	CITATIONS
307	Piezoelectric MoS <sub>2</sub> Nanoflowers (NF's) for Targeted Cancer Therapy by Gelatin-based Shear Thinning Hydrogels. In vitro and In vivo trials. <i>Reactive and Functional Polymers</i> , 2022, 181, 105435.	2.0	3
308	Cocatalyst engineering to weaken the charge screening effect over Au@Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> for piezocatalytic pure water splitting. <i>Catalysis Science and Technology</i> , 2022, 12, 7361-7368.	2.1	5
309	Unveiling the Mechanism of Frictional Catalysis in Water by Bi <sub>12</sub> TiO <sub>20</sub> : A Charge Transfer and Contaminant Decomposition Path Study. <i>Langmuir</i> , 2022, 38, 14153-14161.	1.6	17
310	Dual-defect enhanced piezocatalytic performance of C <sub>3</sub> N <sub>5</sub> for multifunctional applications. <i>Applied Catalysis B: Environmental</i> , 2023, 323, 122196.	10.8	26
311	Design of a piezo-photocatalytic system using both fluid and visible light as driving energy. <i>New Journal of Chemistry</i> , 2023, 47, 589-595.	1.4	2
312	Design strategies and effect comparisons toward efficient piezocatalytic system. <i>Nano Energy</i> , 2023, 107, 108093.	8.2	30
313	Photo-/electro-/piezo-catalytic elimination of environmental pollutants. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2023, 437, 114435.	2.0	21
314	Piezo-photocatalysts based on a ferroelectric high-entropy oxide. <i>Applied Catalysis B: Environmental</i> , 2023, 324, 122204.	10.8	16
315	Dynamically evolving piezoelectric nanocomposites for antibacterial and repair-promoting applications in infected wound healing. <i>Acta Biomaterialia</i> , 2023, 157, 566-577.	4.1	14
316	Fabrication of Metallic Micro-/Nano-Composite Materials for Environmental Applications. <i>Coatings</i> , 2022, 12, 1946.	1.2	1
317	Performance and Mechanism of Hydrothermally Synthesized MoS <sub>2</sub> on Copper Dissolution. <i>Catalysts</i> , 2023, 13, 147.	1.6	2
318	Piezoelectricity of strain-induced overall water splitting of Ni(OH) <sub>2</sub> /MoS <sub>2</sub> heterostructure. <i>Journal of Materials Chemistry A</i> , 2023, 11, 3481-3492.	5.2	11
319	Determination of the key role to affect the piezocatalytic activity of graphitic carbon nitride for tetracycline hydrochloride degradation in water. <i>Chemosphere</i> , 2023, 317, 137828.	4.2	10
320	Inorganic hydrogen-bonded SnO(OH) <sub>2</sub> as molecular springs boosted the piezocatalytic degradation of contaminants. <i>Environmental Science: Nano</i> , 2023, 10, 1109-1125.	2.2	1
321	Functionalized MoS <sub>2</sub> : circular economy SERS substrate for label-free detection of bilirubin in clinical diagnosis. <i>Mikrochimica Acta</i> , 2023, 190, .	2.5	2
322	Ultrafast Piezocatalysts Enabled By Interfacial Interaction of Reduced Graphene Oxide/MoS <sub>2</sub> Heterostructures. <i>Advanced Materials</i> , 2023, 35, .	11.1	26
323	Piezoelectric materials and techniques for environmental pollution remediation. <i>Science of the Total Environment</i> , 2023, 869, 161767.	3.9	52
324	Band Position-independent Piezo-Electrocatalysis for Ultrahigh CO <sub>2</sub> Conversion. <i>Advanced Materials</i> , 2023, 35, .	11.1	31

#	ARTICLE	IF	CITATIONS
325	Emergence of Non-photosensitive Catalytic Techniques for Environmental Remediation and Energy Generation. <i>Chemistry - an Asian Journal</i> , 2023, 18, .	1.7	1
326	Electro-assisted activation of peroxydisulfate in the presence of chloride ion for degradation of sulfamethoxazole. <i>Journal of Cleaner Production</i> , 2023, 405, 136914.	4.6	6
327	Multi-Interface polarization engineering constructed 1T-2H MoS <sub>2</sub> QDs/Y-NaBi(MoO <sub>4</sub> ) <sub>2</sub> multiple heterostructure for high-efficient piezoelectric-photoelectrocatalysis PDE-5i degradation. <i>Applied Catalysis B: Environmental</i> , 2023, 327, 122460.	10.8	6
328	A one-step soft-template hydrothermal preparation and piezoelectric catalytic activity of flowers-like Co-doped MoS <sub>2</sub> microspheres. <i>Journal of Alloys and Compounds</i> , 2023, 945, 169328.	2.8	8
329	Constructing liquid metal/metal-organic framework nanohybrids with strong sonochemical energy storage performance for enhanced pollutants removal. <i>Journal of Hazardous Materials</i> , 2023, 452, 131285.	6.5	2
330	The piezoelectric field-induced rearrangement of free carriers unlocks the high redox ability of 1T@2H-MoS <sub>2</sub> /Bi <sub>2</sub> S <sub>3</sub> piezoelectric catalyst. <i>Applied Surface Science</i> , 2023, 623, 157033.	3.1	6
331	Multifunctional ferroelectric catalysis for water splitting: classification, synergism, strategies and challenges. <i>Materials Today Chemistry</i> , 2023, 30, 101486.	1.7	3
332	Insight into the superior piezophotocatalytic performance of BaTiO <sub>3</sub> //ZnO Janus nanofibrous heterostructures in the treatment of multi-pollutants from water. <i>Applied Catalysis B: Environmental</i> , 2023, 330, 122623.	10.8	34
333	Selective Production of CO from Organic Pollutants by Coupling Piezocatalysis and Advanced Oxidation Processes. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	24
334	Enhanced non-layer-dependent piezo-response in sailboat-like vertical molybdenum disulfide nanosheets for piezo-catalytic hydrogen evolution and dye degradation: Effect of microstructure and phase composition. <i>Journal of Colloid and Interface Science</i> , 2023, 642, 304-320.	5.0	2
335	Strain Engineering to Boost Piezocatalytic Activity of BaTiO <sub>3</sub> . <i>ChemCatChem</i> , 2023, 15, .	1.8	10
336	Performance study of g-C <sub>3</sub> N <sub>4</sub> /carbon black/BiOBr@Ti <sub>3</sub> C <sub>2</sub> /MoS <sub>2</sub> photocatalytic fuel cell for the synergistic degradation of different types of pollutants. <i>Carbon Letters</i> , 2023, 33, 847-862.	3.3	6
337	Efficient hydrogen production from wastewater remediation by piezoelectricity coupling advanced oxidation processes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	3.3	31
338	Ni-doped MoS <sub>2</sub> embedded in natural wood containing porous cellulose for piezo-catalytic degradation of tetracycline. <i>International Journal of Biological Macromolecules</i> , 2023, 233, 123589.	3.6	6
339	Dissolved oxygen in aeration-driven piezo-catalytic for antibiotics pollutants removal in water. <i>Chinese Chemical Letters</i> , 2023, 34, 108229.	4.8	12
340	Piezotronic and piezophototronic effects on sonodynamic disease therapy. , 2023, 1, .		38
341	Textile-based piezocatalytic platform for organics degradation under low-frequency water flow. <i>Journal of Materials Chemistry A</i> , 2023, 11, 7596-7604.	5.2	6
342	High-performance piezocatalytic hydrogen evolution by (Bi <sub>0.5</sub> Na <sub>0.5</sub> )TiO <sub>3</sub> cubes decorated with cocatalysts. <i>Ceramics International</i> , 2023, 49, 20343-20350.	2.3	9

#	ARTICLE	IF	CITATIONS
343	Defect-Modified nano-BaTiO <sub>3</sub> as a Sonosensitizer for Rapid and High-Efficiency Sonodynamic Sterilization. ACS Applied Materials & Interfaces, 2023, 15, 15140-15151.	4.0	10
344	Selective Production of CO from Organic Pollutants by Coupling Piezocatalysis and Advanced Oxidation Processes. Angewandte Chemie, 2023, 135, .	1.6	9
345	Bi <sub>5</sub> Ti <sub>3</sub> FeO <sub>15</sub> Nanofibers for Highly Efficient Piezocatalytic Degradation of Mixed Dyes and Antibiotics. ACS Applied Nano Materials, 2023, 6, 5602-5612.	2.4	8
346	Transition metal dichalcogenides nanomaterials based piezocatalytic activity: recent progresses and outlook. Nanotechnology, 2023, 34, 282001.	1.3	6
347	Custom-Made Piezoelectric Solid Solution Material for Cancer Therapy. Small, 2023, 19, .	5.2	5
348	Highly Efficient Piezocatalytic Activity of Poly(tetrafluoroethylene) for Large-Scale Organic Wastewater Purification. ACS Applied Polymer Materials, 2023, 5, 3585-3594.	2.0	5
364	A bibliometric analysis of molybdenum-based nanomaterials in the biomedical field. Tungsten, 2024, 6, 17-47.	2.0	2
398	Electron/hole piezocatalysis in chemical reactions. Materials Advances, 2023, 4, 6092-6117.	2.6	0
417	Advancing piezoelectric 2D nanomaterials for applications in drug delivery systems and therapeutic approaches. Nanoscale Horizons, 2024, 9, 365-383.	4.1	0
421	A review of the REDOX properties of MoS <sub>2</sub> : From wastewater treatment to tumor therapy. Science China Materials, 2024, 67, 382-396.	3.5	2
423	Progress in the research on organic piezoelectric catalysts for dye decomposition. International Journal of Minerals, Metallurgy and Materials, 2024, 31, 245-260.	2.4	0