

Year 2013

1. "Hydrogen Evolution by Tungsten Carbonitride Nanoelectrocatalysts Synthesized by the Formation of a Tungsten Acid/Polymer Hybrid In Situ."
Zhao, Y.; Kamiya, K.; Hashimoto, K.; Nakanishi, S.
Angew. Chem. Int. Ed. **2013**, *52* (51), 13638-13641.
[doi:10.1002/anie.201307527](https://doi.org/10.1002/anie.201307527) 2013/10/23
2. "Control of Miscibility and Aggregation Via the Material Design and Coating Process for High-Performance Polymer Blend Solar Cells."
Zhou, E.; Cong, J. Z.; Hashimoto, K.; Tajima, K.
Adv. Mater. **2013**, *25* (48), 6991-6996.
[doi:10.1002/adma.201303170](https://doi.org/10.1002/adma.201303170) 2013/10/2
3. "Generation of Electricity and Illumination by an Environmental Fuel Cell in Deep-Sea Hydrothermal Vents."
Yamamoto, M.; Nakamura, R.; Oguri, K.; Kawagucci, S.; Suzuki, K.; Hashimoto, K.; Takai, K.
Angew. Chem. Int. Ed. **2013**, *52* (41), 10758-10761.
[doi:10.1002/anie.201302704](https://doi.org/10.1002/anie.201302704) 2013/9/2
4. "Low Band Gap Polymers for Photovoltaic Device with Photocurrent Response Wavelengths over 1000 nm."
Zhou, E.; Hashimoto, K.; Tajima, K.
Polymer **2013**, *54* (24), 6501-6509.
[doi:10.1016/j.polymer.2013.09.058](https://doi.org/10.1016/j.polymer.2013.09.058)
5. "Nitrogen-Doped Carbon Nanomaterials as Non-metal Electrocatalysts for Water Oxidation."
Zhao, Y.; Nakamura, R.; Kamiya, K.; Nakanishi, S.; Hashimoto, K.
Nat. Commun. **2013**, *4*, 2390.
[doi:10.1038/ncomms3390](https://doi.org/10.1038/ncomms3390) 2013/8/27
6. "Effects of a Side Chain Sequence on Surface Segregation of Regioregular Poly(3-alkylthiophene) and Interfacial Modification of Bilayer Organic Photovoltaic Devices."
Geng, Y. F.; Ma, J. S.; Wei, Q. S.; Hashimoto, K.; Tajima, K.
J. Mater. Chem. A **2013**, *1*(38), 11867-11873.
[doi:10.1039/c3ta12297b](https://doi.org/10.1039/c3ta12297b) 2013/8/21
7. "Electrochemical Gating of Tricarboxylic Acid Cycle in Electricity-Producing Bacterial Cells of *Shewanella*."
Matsuda, S.; Liu, H.; Kouzuma, A.; Watanabe, K.; Hashimoto, K.; Nakanishi, S.

PLoS One **2013**, 8(8), e72901.

[doi:10.1371/journal.pone.0072901](https://doi.org/10.1371/journal.pone.0072901)

2013/8/20

8. “End-On Orientation of Semiconducting Polymers in Thin Films Induced by Surface Segregation of Fluoroalkyl Chains.”
Ma, J. S.; Hashimoto, K.; Koganezawa, T.; Tajima, K.
J. Am. Chem. Soc. **2013**, 135 (26), 9644-9647.
[doi:10.1021/ja4051179](https://doi.org/10.1021/ja4051179) 2013/7/19
9. “Extracellular Electron Transfer of a Highly Adhesive and Metabolically Versatile Bacterium.”
Liu, H.; Ishikawa, M.; Matsuda, S.; Kimoto, Y.; Hori, K.; Hashimoto, K.; Nakanishi, S.
ChemPhysChem **2013**, 14(11), 2407-2412.
[doi:10.1002/cphc.201300207](https://doi.org/10.1002/cphc.201300207) 2013/6/28
10. “Energy-Level Matching of Fe(III) Ions Grafted at Surface and Doped in Bulk for Efficient Visible-Light Photocatalysts.”
Liu, M.; Qiu, X. Q.; Miyauchi, M.; Hashimoto, K.
J. Am. Chem. Soc. **2013**, 135 (27), 10064-10072.
[doi:10.1021/ja401541k](https://doi.org/10.1021/ja401541k) 2013/6/17
11. “Organic Electronic Devices with Copolymers Based on Naphthalene Diimide Connected with Non-conjugated Flexible Linker.”
Zhao, M.; Hashimoto, K.; Tajima, K.
Jpn. J. Appl. Phys. **2013**, 52 (5), 05DA15.
[doi:10.7567/jjap.52.05da15](https://doi.org/10.7567/jjap.52.05da15) 2013/5/20
12. “Synthesis and Characterization of End-Functionalized Poly(3-butylthiophene) with Semifluoroalkyl Chains.”
Ma, J. S.; Geng, Y. F.; Hashimoto, K.; Tajima, K.
acromol. Chem. Phys. **2013**, 214 (12), 1326-1331.
[doi:10.1002/macp.201300081](https://doi.org/10.1002/macp.201300081) 2013/5/17
13. “Synthesis of copolymer based on naphthalene diimide connected with a non-conjugated flexible linker.”
Zhao, M. X.; Hashimoto, K.; Tajima, K.
Synth. Met. **2013**, 175, 9-14.
[doi:10.1016/j.synthmet.2013.04.028](https://doi.org/10.1016/j.synthmet.2013.04.028) 2013/4/28
14. “Extracellular Electron Transfer across Bacterial Cell Membranes via a Cytocompatible Redox-Active Polymer.”
Nishio, K.; Nakamura, R.; Lin, X.; Konno, T.; Ishihara, K.; Nakanishi, S.; Hashimoto, K.

ChemPhysChem **2013**, *14*(10), 2159-2163.

[doi:10.1002/cphc.201300117](https://doi.org/10.1002/cphc.201300117) 2013/4/28

15. "Broad Spectrum Microbicidal Activity of Photocatalysis by TiO₂."
Nakano, R.; Hara, M.; Ishiguro, H.; Yao, Y.; Ochiai, T.; Nakata, K.; Murakami, T.; Kajioka, J.; Sunada, K.; Hashimoto, K.; Fujishima, A.; Kubota, Y.
Catalysts **2013**, *3*, 310-323.
[doi:10.3390/catal3010310](https://doi.org/10.3390/catal3010310) 2013/3/21
16. "Digestion of Algal Biomass for Electricity Generation in Microbial Fuel Cells."
Nishio, K.; Hashimoto, K.; Watanabe, K.
Biosci. Biotechnol., Biochem. **2013**, *77* (3), 670-672.
[doi:10.1271/bbb.120833](https://doi.org/10.1271/bbb.120833) 2013/3/7
17. "A Benzoselenadiazole-Based Low Band Gap Polymer: Synthesis and Photovoltaic Application."
Zhou, E. J.; Cong, J. Z.; Hashimoto, K.; Tajima, K.
Macromolecules. **2013**, *46* (3), 763-768.
[doi:10.1021/ma302596k](https://doi.org/10.1021/ma302596k) 2013/2/4
18. "Donor/Acceptor Interface Modifications in Organic Solar Cells."
Zhong, Y.; Tada, A.; Geng, Y. F.; Wei, Q.; Hashimoto, K.; Tajima, K.
J. Photopolym. Sci. Technol. **2013**, *26* (2), 181-184.
[doi:10.2494/photopolymer.26.181](https://doi.org/10.2494/photopolymer.26.181)
19. "Inactivation of Bacterial Wilt in Closed Soilless Cultivation by Photocatalytic Treatment and Silver."
Miyama, Y.; Kawashima, Y.; Ogawa, J.; Uekusa, H.; Okamoto, T.; Kita, N.; Sunada, K.; Hashimoto, K.
Environ. Control. Biol. **2013**, *51*, 173-178.
[doi:10.2525/ecb.51.173](https://doi.org/10.2525/ecb.51.173)
20. "Iron-Oxide Minerals Affect Extracellular Electron-Transfer Paths of *Geobacter* spp."
Kato, S.; Hashimoto, K.; Watanabe, K.
Microbes and Environments **2013**, *28* (1), 141-148.
[doi:10.1264/jsme2.ME12161](https://doi.org/10.1264/jsme2.ME12161) 2013/1/30
21. "Mechanisms of long-distance extracellular electron transfer of metal-reducing bacteria mediated by nanocolloidal semiconductive iron oxides."
Nakamura, R.; Kai, F.; Okamoto, A.; Hashimoto, K.
J. Mater. Chem. A **2013**, *1* (16), 5148-5157.
[doi:10.1039/c3ta01672b](https://doi.org/10.1039/c3ta01672b)

22. "Hydrothermal Synthesis of Visible Light-Sensitive Conduction Band-Controlled Tungsten-Doped Titanium Dioxide Photocatalysts with Copper Ion-Grafts."
Ni, L.; Kitta, T.; Kumagai, N.; Ohtani, B.; Hashimoto, K.; Irie, H.
J. Ceram. Soc. Jpn. **2013**, *121* (1415), 563-567.
[doi:10.2109/jcersj2.121.563](https://doi.org/10.2109/jcersj2.121.563)
23. "Low-voltage electrochemical CO₂ reduction by bacterial voltage-multiplier circuits."
Mogi, T.; Ishii, T.; Hashimoto, K.; Nakamura, R.
Chem. Commun. **2013**, *49* (38), 3967-3969.
[doi:10.1039/c2cc37986d](https://doi.org/10.1039/c2cc37986d) 2012/12/19
24. "Solution-based synthesis of pyrite films with enhanced photocurrent generation."
Qiu, X. Q.; Liu, M.; Hayashi, T.; Miyauchi, M.; Hashimoto, K.
Chem. Commun. **2013**, *49* (12), 1232-1234.
[doi:10.1039/c2cc38218k](https://doi.org/10.1039/c2cc38218k) 2012/12/18
25. "Rate enhancement of bacterial extracellular electron transport involves bound flavin semiquinones."
Okamoto, A.; Hashimoto, K.; Neilson, K. H.; Nakamura, R.
Proc. Natl. Acad. Sci. U.S.A. **2013**, *110*, 7856-7861.
[doi:10.1073/pnas.1220823110](https://doi.org/10.1073/pnas.1220823110) 2012/11/29
26. "Efficient oxygen reduction by a Fe/Co/C/N nano-porous catalyst in neutral media."
Zhao, Y.; Watanabe, K.; Hashimoto, K.
J. Mater. Chem. A **2013**, *1* (4), 1450-1456.
[doi:10.1039/c2ta00392a](https://doi.org/10.1039/c2ta00392a) 2012/11/16
27. "Electric Field-Induced Dipole Switching at the Donor/Acceptor Interface in Organic Solar Cells."
Zhong, Y.; Ma, J.; Hashimoto, K.; Tajima, K.
Adv. Mater. **2013**, *25* (7), 1071-1075.
[doi:10.1002/adma.201203605](https://doi.org/10.1002/adma.201203605) 2012/11/8
28. "Light/Electricity Conversion by Defined Cocultures of Chlamydomonas and Geobacter."
Nishio, K.; Hashimoto, K.; Watanabe, K.
J. Biosci. Bioeng. **2013**, *115*(4), 412-417.
[doi:10.1016/j.jbiosc.2012.10.015](https://doi.org/10.1016/j.jbiosc.2012.10.015) 2012/10/15
29. "Photocatalytic activity of Cu²⁺/TiO₂-coated cordierite foam inactivates bacteriophages and Legionella pneumophila."
Ishiguro, H.; Yao, Y.; Nakano, R.; Sunada, K.; Kajioaka, J.; Hashimoto, K.; Fujishima, A.; Kubota, Y.
Appl. Catal., B **2013**, *129*, 56-61.

[doi:10.1016/j.apcatb.2012.09.012](https://doi.org/10.1016/j.apcatb.2012.09.012)

2012/9/12

30. "Use of cassette-electrode microbial fuel cell for wastewater treatment."

Miyahara, M.; Hashimoto, K.; Watanabe, K.

J. Biosci. Bioeng. **2013**, *115* (2), 176-181.

[doi:10.1016/j.jbiosc.2012.09.003](https://doi.org/10.1016/j.jbiosc.2012.09.003)

2012/9/3