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The author presented on this page has recently published his 10th article in Angewandte Chemie in the last 10 years:

"Turning Tryptophanase into Odor-Generating Biosensors": Y. Xu, Z. Zhang, M. M. Ali, J. Sauder, X. Deng, K. Giang, S. D. Aguirre, R. Pelton, Y. Li, C. D. Filipe, Angew. Chem. 2014, 126, 2658–2660; Angew. Chem. Int. Ed. 2014, 53, 2620–2622.

## Yingfu Li

**Date of birth**: April 16, 1962

Awards:

Position: Professor of Biochemistry and Chemical Biology, McMaster University

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Education: 1979–1983 BSc, Anhui University

1992–1997 PhD with Prof. Dipankar Sen, Simon Fraser University 1997–1999 Postdoctoral research with Prof. Ronald R. Breaker, Yale University

2001 Canada Research Chair (Government of Canada); CIHR New Investigator Award

(Canadian Institutes of Health Research); 2004 Premier Research Excellence Award

(Government of Ontario); 2007 Distinguished Young Scholar (National Science Foundation of

China); 2012 W. A. McBryde Medal (Canadian Society of Chemistry)

**Current research** Catalytic DNA, aptamers, riboswitches, biosensors, nanotechnology, in vitro selection,

interests: medical diagnostics
Hobbies: Reading, golf, running, music

## My favorite molecule is ... DNA, because it is simple yet mysterious.

When I was eighteen I wanted to be ... a novelist.

If I had one year of paid leave I would ... go back to the bench and do some crazy experiments that I know wouldn't get funded.

My favorite quote is ... "What the mind of man can conceive and believe, it can achieve" (Napoleon Hill).

My favorite time of day is ... morning, as I am fully charged and right on time for my scheduled activities.

admire ... people who are creative.

The principal aspect of my personality is ... that I am reserved, but can be outgoing if necessary.

My favorite book is ... The Old Man and the Sea (Ernest Hemingway).

My motto is ... "be yourself".

am waiting for the day when someone will discover ... a second planet with intelligent life.

Chemistry is fun because ... it allows you to create new things or demonstrate interesting concepts.

The most significant historic event of the past 100 years was ... the economic reform led by Deng Xiaoping that shaped China into a superpower.

## My 5 top papers:

- 1. "A catalytic DNA for porphyrin metallation": Y. Li, D. Sen, *Nat. Struct. Biol.* **1996**, *3*, 743–747. (The DNA enzyme is capable of achieving a catalytic performance on a par with natural ferrochelatases.)
- "Phosphorylating DNA with DNA": Y. Li, R. R. Breaker, *Proc. Natl. Acad. Sci. USA.* 1999, 96, 2746 2751. (A group of catalytic DNA molecules with polynucleotide kinase-like activity.)
- "Structure-Switching Signaling Aptamers": R. Nutiu, Y. Li, J. Am. Chem. Soc. 2003, 125, 4771–4778. (A simple strategy for designing aptamer-based biosensors.)
- 4. "DNA Aptamer Folding on Gold Nanoparticles: From Colloid Chemistry to Biosensors": W. Zhao, W. Chiu-
- man, J. C. Lam, S. A. McManus, W. Chen, Y. Cui, R. Pelton, M. A. Brook, Y. Li, *J. Am. Chem. Soc.* **2008**, 130, 3610–3618. (Colorimetric biosensors were developed based on the observation that gold nanoparticles containing folded aptamers are more stable toward salt-induced aggregation than those containing unfolded aptamers.)
- 5. "Fluorogenic DNAzyme Probes as Bacterial Indicators": M. M. Ali, S. D. Aguirre, H. Lazim, Y. Li, *Angew. Chem.* **2011**, *123*, 3835–3838; *Angew. Chem. Int. Ed.* **2011**, *50*, 3751–3754. (A unique DNAzyme fluoresces upon encountering *E. coli.*)

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