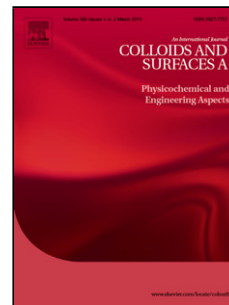


## Accepted Manuscript

Title: Micro-magnetofluidics of ferrofluid droplet formation in a T-junction

Authors: Qindan Zhang, Huajun Li, Chunying Zhu, Taotao Fu, Youguang Ma, Huai Z. Li



PII: S0927-7757(17)30955-X  
DOI: <https://doi.org/10.1016/j.colsurfa.2017.10.056>  
Reference: COLSUA 22014

To appear in: *Colloids and Surfaces A: Physicochem. Eng. Aspects*

Received date: 1-9-2017  
Revised date: 21-10-2017  
Accepted date: 21-10-2017

Please cite this article as: Qindan Zhang, Huajun Li, Chunying Zhu, Taotao Fu, Youguang Ma, Huai Z. Li, Micro-magnetofluidics of ferrofluid droplet formation in a T-junction, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* <https://doi.org/10.1016/j.colsurfa.2017.10.056>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# Micro-magnetofluidics of ferrofluid droplet formation in a T-junction

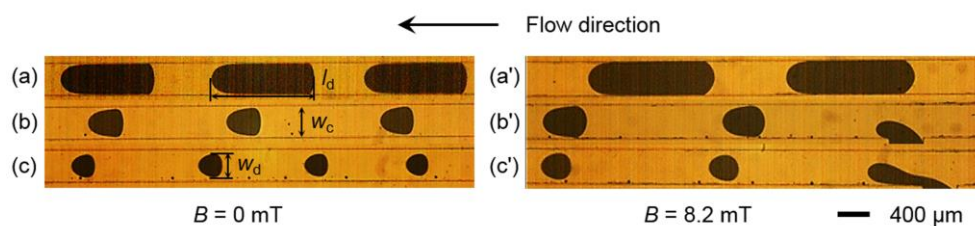
Qindan Zhang<sup>a</sup>, Huajun Li<sup>a</sup>, Chunying Zhu<sup>a</sup>, Taotao Fu<sup>a,\*</sup>, Youguang Ma<sup>a,\*</sup>, Huai Z. Li<sup>b</sup>

<sup>a</sup> State Key Laboratory of Chemical Engineering, Collaborative Innovation Center of Chemical Science and Engineering (Tianjin), School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China

<sup>b</sup> Laboratory of Reactions and Process Engineering, University of Lorraine, CNRS, 1, rue Grandville, BP 20451, 54001 Nancy Cedex, France

Corresponding authors: Youguang Ma (ygma@tju.edu.cn), Taotao Fu (tffu@tju.edu.cn)

Graphical abstract:



**Abstract:** The combination of microfluidics with magnetism has led to the emergence of a new scientific domain known as micro-magnetofluidics. The present study aims to investigate the interfacial dynamics of ferrofluid droplet formation under magnetic field in a microfluidic T-junction. A non-uniform magnetic field was constructed by placing a

Download English Version:

<https://daneshyari.com/en/article/6978103>

Download Persian Version:

<https://daneshyari.com/article/6978103>

[Daneshyari.com](https://daneshyari.com)