



Personnel Infos:

Homepage:

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ResearchGate:

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Google Scholar:

[https://scholar.google.com](https://scholar.google.com/citations?user=pWXuL4EAA)

[/citations?user=pWXuL4EAA](https://scholar.google.com/citations?user=pWXuL4EAA)

[AAJ&hl=zh-CN](https://scholar.google.com/citations?user=pWXuL4EAA)

Language:

Chinese: Maternal

English: IETS 7.0/9.5

Computer skills:

●Programming Language:

C/Python/C++, Matlab,
Mathematica

●Working Software:

Excel/PowerPoint/Word,
PS, and AfterEffect

●Scientific Software:

Abaqus, COMSOL

Proficient in using \LaTeX and
power user of LINUX

Hobby:

Jogging, Traveling,
Photographing, Fitness,
Guitar

Research Interests:

Phase field method,
Finite Difference Method,
Numerical analysis,
Topology optimization

Qing XIA

EDUCATIONS

2021-present

XI'AN JIAO TONG UNIVERSITY(XJTU), CHINA

-Department of Applied Mathematics

-School of Mathematics and Statistics

-Ph.D candidate

2019-2021

XI'AN JIAO TONG UNIVERSITY(XJTU), CHINA

-Department of Applied Mathematics

-School of Mathematics and Statistics

-Master candidate

Sept 2015-Jun 2019

XI'AN JIAO TONG UNIVERSITY(XJTU), CHINA

-Department of Applied Mathematics

-School of Mathematics and Statistics

-Bachelor Degree

MAGNUM OPUS

Multi-physical fields coupled computation

● **Qing Xia**, Qian Yu, Yibao Li, A second-order accurate, unconditionally energy stable numerical scheme for binary fluid flows on arbitrary curved surfaces, *Computer Methods in Applied Mechanics and Engineering*, 384 (2021) 113987.

● **Qing Xia**, Junseok Kim, Binhu Xia, Yibao Li, An unconditionally energy stable method for binary incompressible heat conductive fluids based on the phase-field model, *Computers and Mathematics with Applications*, 123 (2023) 26-39. (SCI, Impact Factor 3.440)

● **Qing Xia**, Junseok Kim, Yibao Li*, Modeling and simulation of multi-component immiscible flows based on a modified Cahn-Hilliard equation, *European Journal of Mechanics-B/Fluids*, 95 (2022) 194-204. (SCI, Impact Factor 2.183)

Topology optimization & 3D printing

● **Qing Xia**, Gangming Sun, Qian Yu, Yibao Li, Thermal-fluid topology optimization with unconditional energy stability and second-order accuracy via phase-field model, *Communications in Nonlinear Science and Numerical Simulation* 116 (2023) 106782. (SCI, Impact Factor 4.260)

● Yibao Li, **Qing Xia**, Sungha Yoon, Chaeyoung Lee, Bingheng Lu, Junseok Kim, Simple and efficient volume merging method for triply periodic minimal structures, *Computer Physics Communications*, 264 (2021) 107956.

Image processing

● Yibao Li, **Qing Xia**, Sungha Yoon, Junseok Kim, A simple and efficient fingerprint image restoration method based on a phase-field model, *Pattern Recognition*, Submitted.

● Jin Wang, **Qing Xia**, Binhu Xia, Fast Image Restoration Method Based on the L0, L1, and L2 Gradient Minimization, *Mathematics* 10 (2022) 3107.

PATENTS

- 李义宝，史政源，夏青，卢秉恒，一种隐形牙套的牙齿-牙龈快速分割方法。(中国专利)
- 李义宝，刘蕊，夏青，一种基于多探测器的自动报靶预测算法。(中国专利)

TECHING EXPERIENCE

Teaching Assistant

Master course, Xi'an Jiaotong University, School of Mathematics and Statistics.

- Numerical Analysis(A)

Instructor: Prof. Dr. Yibao Li, Iharbour, Fall 2020.

- Numerical Analysis(B)

Instructor: Prof. Dr. Yibao Li, Iharbour, Fall 2019.

AWARDS & PROJECTS

⇒Nov 2022	<i>Outstanding Model for the Doctoral students of Xi'an Jiaotong University(2022)</i>
⇒Oct 2022	<i>National Scholarship for Doctoral students(2022)</i>
⇒May 2022	<i>The Fundamental Research Funds for the Central Universities(No. XYZ022022005)</i>
⇒May 2020	<i>Outstanding Communist Youth League cadres of Xi'an Jiaotong University(2020)</i>
⇒Sep 2019	<i>Outstanding Graduate of Xi'an Jiaotong University(2019)</i>