Chen-Zhu Xie

谢尘竹

Portfolio: 🗘 🔼 in

Contact: $\mathbf{\Sigma}$ \mathbb{X}

Scholar: D 💯

Personality: 1 INTP AB

EDUCATION

0.4 Degree	0.2 Major	0.0 Credential (Oute	er) 0.2 Maste	rpiece (Inner)	0.4 Grad. (L)
Doctor of Philosop	ohy Optical E	ngineering 🌎 Q.E T	op 15% 🔼 🛮 Nonl	inear Fourier Optics (27' 2025
L Thesis - Anal	ytic 3D vectorial li	near non-uniform & nonline	ar Fourier crystal opt	ics in arbitrary $ar{ar{arepsilon}},ar{ar{ar{ar{\chi}}}}$ diel	ectrics 🞧 🔟
Master 's Studies	Quantum Elec	ctronics Courses Scor	e - 93.5 (7) THz	(> 6G) OAM Source (24' 2022
△ Affiliation - Co	llege of Engineering	and Applied Sciences, Nanjing	University, No.163 Xia	nlin Avenue , Nanjing, Jia	ngsu, China 🔟
Bachelor of Science	ce Applied Ph	nysics	1/400 () DDTa	nk Auxiliary Tools 🖸	22' 2020
L Thesis - Rese	arch & design of no	onlinear holography based o	n lithium niobate 3D	nonlinear photonic crys	stal 🞧 🔼
Freshman in Univ	ersity Scie	ence Sichuan Prov.	- Top 2% 7 N	Notes → 3 Books ()	18' 2016
∟ Affiliation - Sch	nool of Physics, Coll	ege of Science, Northeastern U	niversity, No.3-11 Wen	hua Road , Shenyang, Liac	oning, China 🔟
Degree	Maj	jor Credential (Outer) Master	piece (Inner)	Grad. 🕒
Degree Doctor		jor Credential (gineering Q.E Top			Grad. ① 27' 2025
Doctor	Optical En		15% Nonlinear	Fourier Optics 😯	27' 2025
Doctor	Optical En	gineering	15% Nonlinear ar Fourier crystal opt	Fourier Optics \Box ics in arbitrary $\bar{\bar{\varepsilon}}, \bar{\bar{\chi}}$ diel	27' 2025
Doctor L Thesis - Anal Master	Optical En ytic 3D vectorial lin Quantum E	gineering	Nonlinear rar Fourier crystal opt - 93.5 THz (> 60	Fourier Optics $\hat{\bar{\epsilon}}$ ics in arbitrary $\bar{\bar{\epsilon}}, \bar{\bar{\chi}}$ diel OAM Source	27' 2025 lectrics ?
Doctor L Thesis - Anal Master	Optical En ytic 3D vectorial lin Quantum E	gineering Q.E Top near non-uniform & nonline clectronics Courses Score and Applied Sciences, Nanjing	Nonlinear rar Fourier crystal opt - 93.5 THz (> 60	Fourier Optics $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	27' 2025 lectrics ?
Doctor L Thesis - Anal Master L Affiliation - Co Bachelor	Optical Engytic 3D vectorial lingular Quantum Ellege of Engineering	gineering Q.E Top near non-uniform & nonline clectronics Courses Score and Applied Sciences, Nanjing	Nonlinear rar Fourier crystal opt - 93.5 THz (> 60 University, No.163 Xia 1/400 DDTank A	Fourier Optics $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	27' 2025 lectrics
Doctor L Thesis - Anal Master L Affiliation - Co Bachelor	Optical Engytic 3D vectorial lingular Quantum Ellege of Engineering	gineering Q.E Top near non-uniform & nonline Clectronics Courses Score and Applied Sciences, Nanjing Physics GPA Rank - onlinear holography based of	Nonlinear rar Fourier crystal opt - 93.5 THz (> 60 University, No.163 Xia 1/400 DDTank Am lithium niobate 3D	Fourier Optics $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	27' 2025 lectrics

ACADEMIC FOCUS

Next generation high N.A. 3D vector non-uniform analytic linear & nonlinear Fourier crystal optics 📢	2024.06
93 Paraxial $k_0^\omega \Rightarrow ext{ High N.A.}$ 3D vector non-uniform analytic linear & nonlinear Fourier crystal optics $oldsymbol{f Q}$	2024.03
12 Emphasizing $G^\omega_{ ext{xyz}} \Rightarrow$ 3D vector non-uniform analytic linear & nonlinear Fourier crystal optics $oldsymbol{\Omega}$	2023.12
Involving $\overset{\mathbb{Z}}{\chi}^{(2)}_\omega$ anisotropy \Rightarrow Vector non-uniform analytic linear & nonlinear Fourier crystal optics $oldsymbol{\Omega}$	2023.06
103 !Unitary $G_{\omega}^{\pm} \Leftarrow$!Hermitian $\bar{\bar{\varepsilon}}_{\mathrm{r}}^{\omega} \Rightarrow \mathbf{Non\text{-}uniform}$ analytic linear & nonlinear Fourier crystal optics \mathbf{Q}	2023.03
Solution $\mathcal{F}\left[m{E}_{\omega}^{\pm}\right]$ to $\left(m{\nabla}^2+k_{\omega\pm}^2\right)m{E}_{\omega}^{\pm}\proptom{P}_{\omega\pm}^{(2)}\Leftrightarrow$ Analytic linear & nonlinear Fourier crystal optics $m{\Omega}$	2022.09
Solution $\mathcal{F}[E_3] = \mathcal{F}[f(\mathcal{F}^{-1}[\cdot])]$ to the Eq. below \Leftrightarrow Nonlinear angular spectrum theory for SFG \bigcirc	2022.06
O3 Solution $\mathcal{F}\left[E_{3}\right]=\iiint$ to $\left(\mathbf{\nabla}^{2}+k_{3}^{2}\right)E_{3}\left(r\right)\propto P_{3}^{\left(2\right)}\left(r\right)\Leftrightarrow$ Nonlinear convolution solution to SFG \P	2022.03

TEACHING

• Head Teaching Assistant at University Name

Spring 2019

Course Name (COURSE CODE)

• Teaching Assistant at University Name

Course Name (COURSE CODE)

Spring 2017

Skills

• Skill Group: List of technologie

• Skill Group: List of technologies

• Skill Group: List of technologies

• **Skill Group:** List of technologies

LANGUAGES

• Language: language proficiency level

- EXAM: details

• Language: language proficiency level

• Language: language proficiency level

PROJECTS

See full list of projects on example.com/projects

Project Title (Technology Used, 2019)
Short explanation of the project

Project Title (Technology Used, 2019)

Short explanation of the project

Honors & Awards

Academic Awards

Honorary Titles Lane © Excellent Bachelar Dissertation
© Excellent League Member
0.135

Northeastern University

Northeastern University

2019.11

2020.06

0.855

1

HONORARY TITLES

2019.11	Excellent League Member of 😱	Northeastern University
2018.12	Excellent Undergraduate Student of 📢	Northeastern University

COMPETITION AWARDS

2019.11	Excellent League Member 🜎	Northeastern University
2018.06	Excellent Undergraduate Student 🗘	Northeastern University

SCHOLARSHIPS FELLOWSHIPS

2019.04	JinChuan 1st scholarship - 5,000 rmb 😱	Northeastern University
2018.06	1st scholarship - 2,000 rmb 🕥	Northeastern University

Extracurricular Activities

Member at Some Club	2017-Current
Detailed explanation of what you do at this club	
Member at Some Club	2016-2017
Detailed explanation of what you do at this club	
Volunteer at Some Event	Fall 2019
Detailed explanation of what you do in this event	
Volunteer at Some Event	Winter 2015
Detailed explanation of what you do in this event	