Chen-Zhu Xie

谢尘竹

Portfolio: 🗘 🔼 in

Contact: ${f igwedge}{\mathbb X}$

Scholar: D 🞖

Personality: 1 INTP AB

EDUCATION

Masterpiece (Inner)	Major	Degree	Credential (Outer)	University - QS	Grad. 🕒
Nonlinear Fourier Optics 🜎	Optical Engineering $^{\rm 1}$	Ph.D.	① Q.E Top 15%	Nanjing U 140	27' 2025
THz (> 6G) OAM Source 🗘	Quantum Electronics	Master	Courses Score - 93.5 😱	Nanjing U 140	24' 2022
DDTank Auxiliary Tools 🕨	Applied Physics 2	Bachelar	(400 GPA Rank - 1/400 C)	Northeastern U.	22' 2020
7 Notes \rightarrow 3 Books \bigcirc	Science	Awaken	Sichuan Prov Top 2%	Leshan No.1 H.S.	18' 2016

 $^{^1}$ **Thesis** - Analytic 3D vectorial linear non-uniform & nonlinear Fourier crystal optics in arbitrary $\bar{\bar{\varepsilon}}, \bar{\bar{\chi}}$ dielectrics

EXPERIENCE

Next generation high N.A. 3D vector non-uniform analytic linear & nonlinear Fourier crystal optics 🔾	2024.06
Tight Focus \Rightarrow High N.A. 3D vector non-uniform analytic linear & nonlinear Fourier crystal optics \bigcirc	2024.03
$ \text{Stressing z-component} \Rightarrow \textbf{3D vector non-uniform analytic linear \& nonlinear Fourier crystal optics} \ \boldsymbol{\bigcirc} $	2023.12
Involving $\bar{\chi}^{(2)}_{\omega}$ anisotropy \Rightarrow Vector non-uniform analytic linear & nonlinear Fourier crystal optics \Box	2023.06
!Unitary $G^\pm_\omega \Leftarrow$!Hermitian $\bar{\bar{arepsilon}}^\omega_r \Rightarrow$ Non-uniform analytic linear & nonlinear Fourier crystal optics \P	2023.03
Solution $\mathcal{F}\left[E_{\omega}^{\pm}\right]$ to $\left(\mathbf{\nabla}^2+k_{\omega\pm}^2\right)E_{\omega}^{\pm}\propto P_{\omega\pm}^{(2)}$, i.e. Analytic linear & nonlinear Fourier crystal optics \mathbf{Q}	2022.09
Solution $\mathcal{F}[E_3] = \mathcal{F}[f(\mathcal{F}^{-1}[\cdot])]$ to the Eq. below, i.e. Nonlinear angular spectrum theory for SFG \square	2022.06
Solution $\mathcal{F}\left[E_{3}\right]=\iiint$ to $\left(\mathbf{\nabla}^{2}+k_{3}^{2}\right)E_{3}\left(r\right)\propto P_{3}^{\left(2\right)}\left(r\right)$, i.e. Nonlinear convolution solution to SFG \square	2022.03

 $^{^2}$ **Thesis** - Research & design of nonlinear holography based on lithium niobate 3D nonlinear photonic crystal

TEACHING

TEACHING		
Head Teaching Assistant at University Name Course Name (COURSE CODE)		Spring 2019
• Teaching Assistant at University Name Course Name (COURSE CODE)		Spring 2017
Skills	Languages	
Skill Group: List of technologies	Language: language proficiency level	
• Skill Group: List of technologies	- EXAM: details	
• Skill Group: List of technologies	• Language: language proficiency level	
• Skill Group: List of technologies	Language: language proficiency level	
Projects		
See full list of projects on example.com/projects		
Project Title (Technology Used, 2019)	Project Title (Technology Used, 2019)	
Short explanation of the project	Short explanation of the project	
Scholarships and Awards		
Some Scholarship		2018-2020
Some Award		2018
Some Award		2017
• Some Award		2016
Some Scholarship		2013-2018
Some Scholarship		2013-2018
• Some Award		2013
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