



<b>Next generation</b> high N.A. 3D vector non-uniform analytic linear & nonlinear Fourier crystal optics	2024.06
!Paraxial $k_0^\omega$ <b>High N.A.</b> 3D vector non-uniform analytic linear & nonlinear Fourier crystal optics	2024.03
Emphasizing $G_{xyz}^\omega$ <b>3D</b> vector non-uniform analytic linear & nonlinear Fourier crystal optics	2023.12
Involving $\bar{\chi}_\omega^{(2)}$ anisotropy <b>Vector</b> non-uniform analytic linear & nonlinear Fourier crystal optics	2023.06
!Unitary $G_\omega^\pm \Leftarrow$ !Hermitian $\bar{\epsilon}_r^\omega \Rightarrow$ <b>Non-uniform</b> analytic linear & nonlinear Fourier crystal optics	2023.03
Solution $E_\omega^\pm$ to $(\nabla^2 + k_{\omega\pm}^2)E_\omega^\pm \propto P_{\omega\pm}^{(2)}$ <b>Analytic</b> linear & nonlinear Fourier crystal optics	2022.09
Solution $\mathcal{F}[E_3] = \mathcal{F}[f(\mathcal{F}^{-1}[\cdot])]$ to the Eq. below <b>Nonlinear</b> angular spectrum theory for SFG	2022.06
Solution $\mathcal{F}[E_3] = \iiint$ to $(\nabla^2 + k_3^2)E_3(r) \propto P_3^{(2)}(r)$ <b>Nonlinear</b> convolution solution to SFG	2022.03
Nonlinear THz LiNbO <sub>3</sub> -based metasurface <b>Quit THz project formally</b>   COMSOL	2022.01
BWOPO + THz optical parametric amplification      Mathematica   BookxNote Pro	2021.12
THz backward optical parametric oscillator (BWOPO)      Mathematica   VBA Excel	2021.11
Multi-cycle THz orbital angular momentum (OAM) source      RoamEdit   Blender	2021.11
Narrow-band THz OAM source via Optical Rectification (OR)      Python   Blender	2021.10
Electricity $\xrightarrow{\text{produce}}$ Acoustics $\xrightarrow{\text{modulate}}$ Optics      RoamEdit   VBA Excel	2021.07
Visible Photons $\xrightarrow{\text{SPDC}}$ THz Spectroscopy      BookxNote Pro   GeoGebra   VBA Excel	2021.06
Cavity Phase Matching = Sheet OPO      Paint 3D   RoamEdit   GeoGebra   VBA Excel	2021.05
THz Holography via Optical Rectification      Matlab   GeoGebra   VBA Excel	2021.01
Femtosecond laser $\xrightarrow{\text{Optical Rectification}}$ Terahertz (THz)      GeoGebra   VBA Excel	2020.12
Multicycle THz pulse generation by OR in LiNbO <sub>3</sub> ... crystals      VBA PowerPoinT	2020.10



















## SKILLS

- **Skill Group:** List of technologies
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## LANGUAGES

- **Language:** language proficiency level
- **EXAM:** details
- **Language:** language proficiency level
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## HONORS & AWARDS

Academia	Doctor's Qualification Exam (Oral) 	Excellent 	Top 15%	Nanjing U.	2024.01
	Bachelor Dissertation  & Defense 	Excellent 	1/90	Northeastern U.	2020.06
Competition	Three Provinces Achievement Expo 	Exhibition 	Leader	Three Prov.	2019.10
	"Challenge Cup" Tech Competition 	Grand prize 	Leader	Liaoning Prov.	2019.06
Scholarships & Fellowships	Academic Fellowship	1st class	¥40,000	Nanjing U.	2020-24
	"Jinchuan" Scholarship	1st place 	¥5,000	Northeastern U.	2019.04
	Academic Scholarship	1st place 	¥2,000	Northeastern U.	2018.06
	Entrance Scholarship	3rd place	¥5,000	Leshan No.1 H.S.	2013.09
Honors & Titles	Graduation with Honor 	Outstanding		Northeastern U.	2020.07
	League Member 	Excellent 		Northeastern U.	2019.11
	Undergraduate Student	Excellent 		Northeastern U.	2018.12
Memberships	Chinese Society for Optical Engineering	Member 		Nanjing U.	2021-25
	"Qian Sanqiang" Talent Class	Head 		I.H.E.P. 	2017-20

## 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*