

Hiroki Tomita

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Keio University

Education

PhD, Applied Physics		Eindhoven University of Technology			
06/2022 – (05/2026)	Department of Applied Physics and Science Education	ation			
Master of Science in E	Master of Science in Engineering, Chemistry Keio University (Japan)				
04/2019 - 03/2022	School of Integrated Design Engineering, Graduate School of Science and Technology				
Master of Science in Engineering, Engineering chemistry KTH Royal Institute of Technology (Sweden)					
08/2019 - 03/2021	D21 Engineering in Sciences in Chemistry, Biotechnology and Health				
Bachelor of Engineering, Chemistry Keio University					
04/2015 - 03/2019	Department of Applied Chemistry, Faculty of Scie	nce and Technology			
		6,			
Research Proje	ects				
Research Proje Group Molecular Mat	erials and Nanosystems	Eindhoven University of Technology			
Research Proje Group Molecular Mat 06/2022 – Present	erials and Nanosystems Project: Suppressing Exciton Quenching in OLEDs (funded by Netherlands organization for	Eindhoven University of Technology s: an Integrated Approach (<i>SEQUOIA</i>) • scientific research, NWO)			
Research Proje Group Molecular Mat 06/2022 – Present Division of Applied Ph	erials and Nanosystems Project: Suppressing Exciton Quenching in OLEDs (funded by Netherlands organization for	Eindhoven University of Technology s: an Integrated Approach (<i>SEQUOIA</i>) • scientific research, NWO) KTH Royal Institute of Technology			
Research Proje Group Molecular Mat 06/2022 – Present Division of Applied Ph 07/2020 – 03/2021	erials and Nanosystems Project: Suppressing Exciton Quenching in OLEDs (funded by Netherlands organization for pysical Chemistry Project: Synthesis and Characterization of Coppe	Eindhoven University of Technology s: an Integrated Approach (SEQUOIA) scientific research, NWO) KTH Royal Institute of Technology er Halide Complex Materials			

Inorganic Structural Science Laboratory

04/2021 - 03/2022	Project: Fabrication of Textured P-type Semiconductor Cul Films for Photo-functionalization
04/2018 – 07/2019	Project: Synthesis of Mesoporous Cubic ZnO Particles by the Control of MOF-5 Morphology and the Application for Self-Assembled Films

Certification, Areas of Expertise & Analyzing Tools

Hazardous Materials Engineer's License Class A Issued by the Government of Japan **Optoelectronics Photovoltaics Physical Chemistry** Inorganic chemistry Laser optics PL/UV-Vis spectroscopy XPS XRD ٠ I-V measurement ٠ SEM • EDX TEM • FT-IR AFM NMR ٠ • Raman • ٠ ٠ etc. Languages Japanese Dutch $\bullet \bullet \circ \circ \circ$ Swedish $\bullet \circ \circ \circ \circ$ English 0000 • • • • • 0 German Serbian

Work Experiences (aside from research)

11/2022 – Present	Teaching assistant at TU/e Tutoring bachelor students for the experimental physics course	Netherlands
10/2021 – 03/2022	Learning support assistant at Keio University Study counseling and support for university students at the library	Japan
11/2020 – 03/2021	Student tutor (private) Teaching mathematics and physics to high school students	Sweden

Conference Presentations (excluding posters)

Theme:	Simulation-assisted experimental study of the mechanism of t quenching in OLEDs	he efficiency ro	oll-off due to triplet-polaron		
Contrik	outors: H. Tomita*, C. van Hoesel, C.H.L. Weijtens, P.A. Bobbert,	R. Coehoorn			
∻	CEL 2024 (conference on electroluminescence)	11/2024	Kyoto, Japan		
-	> Best oral prize from Chemical Science (Royal Society of Chemis	stry)			
♦ 1	CSM 2024 (conference on synthetic electronics materials)	06/2024	Dresden, Germany		
∻	SPIE Photonics Europe	04/2024	Strasbourg, France		
Theme:	Step-wise synthesis of CuI film through vapor iodization of self in optoelectronic devices	-assembled Cu	nanoparticles for potential use		
Contrib	outors: H. Tomita*, J. M. Gardner, M. Hagiwara, S. Fujihara				
* 1	Materials Research Meeting 2021	12/2021	Yokohama, Japan		
* 2	^{41st} Electronics Division Meeting of the Ceramic Society of Japan	11/2021	Online (Japan)		
Theme:	Copper iodide complex materials for energy efficient and inexp	ensive photov	oltaic applications		
Contrik	outors: H. Tomita*, J. M. Gardner				
* (GRØN DYST (Green Challenge)	06/2021	Online (Denmark)		
Public	ications				
Spectroel organic li S. E. / Adva	lectrochemical determination of Förster radii for triplet-polaron ght-emitting diodes A. Jaspars, H. Tomita, C. van Hoesel, N. Daub, R. A. J. Janssen, and nced Functional Materials, 2025, 2425548.	quenching in p R. Coehoorn	hosphorescent 2025		
Unravellir	ng quantum mechanics for brighter OLEDs		2023		
H. To	H. Tomita, C. van Hoesel				
TU/e magazine, ICMS(Institute for Complex Molecular Systems) Highlights, Vol. 21					
Programming, Computational Tools					
• Pyt • Kin	thon, (MATLAB, Mathematica) etic Monte Carlo simulation tool, bumblebee [™] softw	vare by 🔫 S	5CM		
≻ Gran	ts & Scholarships				
Keio Lea d for	ding-edge Laboratory of Science and Technology the participation of international conference		04/2021 – 03/2022		
NSK Scho	plarship Foundation		08/2019 – 03/2021		
for	the Double Degree Program at KTH Royal Institute of Technology	,			
Keio Inte for	rnational Human Resources Development Fund the participation of Summer School at RWTH Aachen		08/2016		
Keio Scholarship with government grants			04/2016 - 03/2017		