



## Public announcement of Collaborative Research, Phase 1

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Research Theme	Near IR resonant absorption for luminescent solar power		
Research Period	Jan. 1, 2021 - Dec. 31, 2022		
Researcher Information	Technion		<b>Carmel Rotschild</b> Associate Professor Faculty of Mechanical Engineering
	Tokushima Univ.		<b>Taka-aki Yano</b> Professor Institute of Post-LED Photonics
Publication List (Published Papers, conference, presentations, etc)	<p><b>Patent</b></p> <ul style="list-style-type: none"> <li>• C. Rotschild, J. Cassell, Heat engine for heat sources such as solar energy and wasted heat, Provisional Patent Application No. 63/074,485 (Sep. 2020)</li> <li>• 7 different patents on the heat engine were submitted as provisional applications.</li> </ul> <p><b>Invited talk</b></p> <ul style="list-style-type: none"> <li>• T. Yano, "All-dielectric metamaterial reflectors for highly-sensitive infrared spectroscopy," A3 Metamaterials Forum, Seoul, Korea, June 27-29, 2022.</li> </ul> <p><b>Publication</b></p> <ul style="list-style-type: none"> <li>• T. Tanaka, T. Yano, and R. Kato, "Nanostructure-enhanced infrared spectroscopy," Nanophotonics 11, 2541-2561 (2022).</li> </ul>		