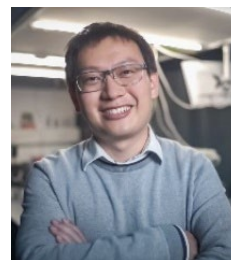


Curriculum vitae

Dr Haoran Ren

School of Physics and Astronomy, Monash University

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RESEARCH MOTIVATION

My nanophotonics research exploits the full potential and multi-dimensional nature of light, enabling enhanced and tailored light-matter interactions at the nanoscale, having a major impact on light's science and technologies.

CAREER HISTORY

- 2022 – ARC DECRA Fellow at Monash University.
- 2020 – 2022 MQ Research Fellow at Macquarie University.
- 2019 – 2020 Humboldt Research Fellow at LMU Munich (advisor: Prof. Stefan Maier).
- 2016 – 2018 Postdoctoral Fellow at RMIT University.

ACADEMIC QUALIFICATIONS

- February 2017 PhD, Centre for Micro-Photonics, Swinburne University of Technology.
Supervisor: Prof. Min Gu. Thesis title: *"Nanophotonic manipulation of angular momentum of light for information optics"*
- July 2012 Master of Science, Ocean University of China.
- July 2010 Bachelor of Science, Ocean University of China.

COMPETITIVE RESEARCH FUNDING AND FELLOWSHIPS

- 2023 Perkins ECR Awards (co Chief Investigator, \$100k)
- 2022 Monash Uplift grant (Lead Chief Investigator, \$20k)
- 2022 Macquarie Acceleration Scheme (co-Chief Investigator, \$100k).
- 2022 ARC DP (Lead Chief Investigator, >\$350k).
- 2022/2020 MQ Research Infrastructure Schemes (co-Chief Investigator, >\$400k).
- 2022 ARC DECRA (Chief Investigator, >\$400k).
- 2021 Macquarie University Research Fellowship (Chief Investigator, >\$350k).
- 2020 Centre for NanoScience seed funding at LMU Munich (co-Chief Investigator, >\$20k).
- 2019 Humboldt Research Fellowship (Chief Investigator, >\$200k).

AWARDS AND RESEARCH HIGHLIGHTS

- 2023 Finalists for the 2023 Rising Stars of Light.
- 2022 Emerging Leaders 2022 – Journal of Optics.
- 2022 ANZOS Geoff Opat Early Career Researcher Prize.
- 2022 MQ Research Spotlight.
- 2018 World Technology Awards – Winner of Communications Technology.
- 2017 Victoria Fellowship.
- 2016 Chinese Outstanding Self-financed Students Abroad (Special Prize).
- 2015 OSA Robert S. Hilbert Student Travel Grant.

SPECIAL RECOGNITIONS

- 2022-2023 Associated Investigator, The ARC TMOS Centre of Excellence.
- 2021-2022 Secretary at The OPTICA (formerly OSA) Sydney Local Section.
- 2022-2027 Honorary Research Fellow, Macquarie University.

PROFESSIONAL ENGAGEMENT

EDITORIAL

2022- APL Photonics Early Career Editorial Advisory Board.

CONFERENCE/WORKSHOP ORGANISING/CHAIRING COMMITTEE

2024 PIERS Conference Focused Session (co-chair).
2023 ANZCOP Focused Session on structured light (co-chair).
2023 CLEO US (Presider for 3 topical sessions).
2023 Optica Advanced Photonics Congress (subcommittee in novel materials).
2022 Panelist in iCANX Talks.
2022 Workshop on 3D Printing of Photonics Materials (AIP Conference).
2022 The OPTICA (formerly OSA) Latin America Optics and Photonics Conference.
2021 WILEY Photonics & Advanced Intelligent Systems International Conference.
2021 The OPTICA (formerly OSA) Sydney Local Section Seminars.
2021/2022 MQ Photonics Seminars (co-Chair).
2021 ANZCOP Conference.
2018 The CUDOS Workshop on Frontiers in Nanoplasmonics.
2017 The Selby Public Lecture at RMIT University.

REGULAR REVIEW

Reviewer for top tier international journals including *Nature*, *Science Advances*, *Nature Photonics*, *Nature Nanotechnology*, *Nature Communications*, *Nature Electronics*, *Light Science & Applications*, *Communications Physics*, *eLight*, *Optica*, *Optics Letters*, *Optics Express*, *Nano Letters*, *ACS Photonics*, *ACS Applied Nano Materials*, *APL Photonics* and *Nanophotonics*.

Reviewer for the Australian Research Council Discovery Grants.

MEMBERSHIP

Member of OPTICA (formerly OSA), SPIE, ANZOS, Elected Secretary of the OPTICA Sydney Local Section (2021), Elected event officer in the executive committee of the OSA Photonics Metamaterials Technical Group (2020).

SUPERVISION AND MENTORING

2023 School of Physics and Astronomy, Monash University
Primary: 1 postdoc, 2 masters, 2 undergraduates.
Co-supervising: 1 postdoc, 1 Honours.
2022 School of Mathematical and Physical Sciences, Macquarie University
1 undergraduate.
2019-2022 Chair in Hybrid Nanosystems – Hybrid Nanophotonics & Plasmonic Chemistry
Co-supervised: 1 PhD, 2 masters, and 1 visiting PhD.
2017-2018 School of Science, RMIT University
Co-supervised: 1 visiting PhD.

TEACHING

2023 *Monash University* – 3 guest lectures on “Introduction to Nanophotonics and Meta-optics, Physics and Astronomy, Semester 1, 2023”.
2021 *POSTCH University* - invited Australia-Korean lectureship talk “Metasurfaces for advanced light manipulation and information processing”.
2021 *LMU Munich University* - invited lecture talk “Introduction to Nanophotonics and Meta-optics”.

OUTREACH

2022 *NKT Photonics* case - “Dispersion engineering with meta-optics”.
2021 *Macquarie University ECR Showcase* – “Metafibre optics”.
2020 *Behind the paper* – “Twisted light for a metasurface holographic video display”, *Nature Research Ecology & Evolution Community*.

PATENTS

J. M. Dawes, H. Ren, and S. Gross, “Orbital angular momentum multiplexer and demultiplexer”, PCT/AU2022/050797 (2022).

M. Gu, Y. Cao, Z. Gan, X. Li, B. Mashford, H. Ren and Q. Zhang, “Media, systems and methods for optical data storage” PCT/CN2016/100832 (2016).

SCIENTIFIC OUTPUTS

42 journal publications with over **3200** citations ([Google Scholar](#)).

High-impact journal publications include *Science/Nature* family journals, *Physical Review Letters*, *Chemical Reviews*, *Nano Letters*, *Advanced Materials*, *ACS Nano*, *ACS Photonics*, *Advances in Optics and Photonics* etc.

Invited commentaries/perspectives:

- Aigner, J. Dawes, S. A. Maier, and H. Ren, “Nanophotonics shines light on hyperbolic metamaterials”, *Light: Sci. & Appl.* (2022).
- H. Ren, “A light-programmable metasurface”, *Nat. Electron.* (2020).

63 conference abstracts, **17** invited conference talks at major international conferences, including CLEO US, SPIE Photonics West, PIERS, and MRS Fall. **18** invited seminars and lectureship presentations at various universities.

PUBLICATIONS AND CONFERENCE PRESENTATIONS

JOURNAL ARTICLES (†Corresponding author(s); ‡Equal contributions)

1. †A. Márquez, C. Li, A. Beléndez, †S. A. Maier, †H. Ren, Information multiplexing from holography to metasurfaces, to be submitted (2023).
2. †S. Lee, C. Fan, A. Movsesyan, J. Bürger, F. J. Wendisch, L. d. S. Menezes, S. A. Maier, H. Ren, T. Liedl, L. V. Besteiro, †A. O. Govorov, †E. Cortés, Unraveling the chirality transfer from circularly polarized light to single plasmonic nanoparticles, submitted (2023).
3. L. Sortino, A. Gale, L. Kühner, C. Li, J. Biechteler, F. J. Wendisch, M. Kianinia, H. Ren, M. Toth, S. A. Maier, †I. Aharonovich, †A. Tittl, Optically addressable spin defects coupled to bound states in the continuum metasurfaces, <https://doi.org/10.48550/arXiv.2306.05735> (2023).
4. †W. Lu, L. S. Menezes, A. Tittl, H. Ren, †S. A. Maier, Active Huygens’ metasurface based on in-situ grown conductive polymer, <https://arxiv.org/abs/2305.07356> (2023).
5. M. Nonahal, C. Li, H. Ren, L. Spencer, M. Kianinia, M. Toth, †I. Aharonovich, Engineering Quantum Nanophotonic Components from Hexagonal Boron Nitride, <https://doi.org/10.48550/arXiv.2303.02903> *Laser & Photonics Reviews*, <https://doi.org/10.1002/lpor.202300019> (2023).
6. C. He, Z. Tang, L. Liu, S. A. Maier, †X. Wang, †H. Ren, †A. Pan, Spin- and orbital-angular-momentum nonlinear optical selectivity of single-mode nanolasers, <https://arxiv.org/abs/2303.01703> (2023).
7. C. Li, T. Wieduwilt, F. J. Wendisch, A. Márquez, L. de S. Menezes, †S. A. Maier, †M. A. Schmidt, †H. Ren, Metafiber transforming arbitrarily structured light, <https://arxiv.org/abs/2302.13010> (2023).
8. ‡†C. Li, ‡J. Jang, ‡T. Badloe, T. Yang, J. Kim, J. Kim, M. Nguyen, S. A. Maier, †J. Rho, †H. Ren, I. Aharonovich, Arbitrary structured quantum emission with a multifunctional imaging metalens, *eLight*, 3, 19 (2023).
9. †Konstantin Y. Bliokh, Ebrahim Karimi, Miles J. Padgett, Miguel A. Alonso, Mark R. Dennis, Angela Dudley, Andrew Forbes, Sina Zahedpour, Scott W. Hancock, Howard M. Milchberg, Stefan Rotter, Franco Nori, Şahin K. Özdemir, Nicholas Bender, Hui Cao, P. B. Corkum, Carlos Hernández-García,

Haoran Ren, Yuri Kivshar, Mário G. Silveirinha, Nader Engheta, Arno Rauschenbeutel, Philipp Schneeweiss, Jürgen Volz, Daniel Leykam, Daria A. Smirnova, Kexiu Rong, Bo Wang, Erez Hasman, Michela F. Picardi, Anatoly V. Zayats, Francisco J. Rodríguez-Fortuño, Chenwen Yang, Jie Ren, Alexander B. Khanikaev, Andrea Alù, Etienne Brasselet, Michael Shats, J. Verbeeck, P. Schattschneider, Michael Birk, Alexey Gorlach, and Ido Kaminer, F. Cardano, L. Marrucci, Mario Krenn, and Florian Marquardt, Roadmap on structured waves, *J. Opt.*, accepted <https://arxiv.org/abs/2301.05349> (2023).

10. †C. Liu, S. Zhang, S. A. Maier, and †H. Ren, Disorder-induced topological phase transition in the optical skyrmions family, *Phys. Rev. Lett.*, 129, 267401 (2022).
11. †A. Aigner, A. Tittl, J. Wang, T. Weber, Y. Kivshar, †S. A. Maier, and †H. Ren, Plasmonic bound states in the continuum to tailor light-matter coupling, *Sci. Adv.*, 8, 49 (2022).
12. †A. Mancini, L. Nan, F. J. Wendisch, R. Berté, H. Ren, E. Cortés, and S. A. Maier, Near-field retrieval of phonon polariton dispersion in suspended silicon carbide thin films, *ACS Photonics*, 9, 11, 3696–3704 (2022).
13. T. Dinter, C. Li, L. Kühner, T. Weber, A. Tittl, †S. A. Maier, †J. M. Dawes, and †H. Ren, Metasurface measuring twisted light in turbulence, *ACS Photonics* 9, 9, 3043–3051 (2022).
14. L. Kühner, L. Sortino, R. Berté, J. Wang, H. Ren, S. A. Maier, Y. S. Kivshar, and †A. Tittl, Radial bound states in the continuum for polarization-invariant nanophotonics, *Nat. Commun.*, 13, 4992 (2022).
15. I. Vincon, F. J. Wendisch, D. D. Gregorio, S. D. Pritzl, Q. A. Akkerman, H. Ren, L. D. S. Menezes, S. A. Maier, and †J. Feldmann, Strong Polarization Dependent Nonlinear Excitation of a Perovskite Nanocrystal Monolayer on a Chiral Dielectric Nanoantenna Array, *ACS Photonics*, 9, 11, 3506–3514 (2022).
16. †, †H. Ren, †J. Jang, †C. Li, A. Aigner, M. Plidschun, J. Kim, †J. Rho, †M. A. Schmidt, and †S. A. Maier, An achromatic metafiber for focusing and imaging across the entire telecommunication range, *Nat. Commun.*, 13, 4183 (2022).
17. †, †E. Cortes, †F. J. Wendisch, †L. Sortino, A. Mancini, S. Ezendam, S. Saris, L. D. S. Menezes, A. Tittl, H. Ren, †S. A. Maier, Metasurfaces for energy conversion, *Chem. Rev.* 122, 19, 15082–15176 (2022).
18. †H. Ren, Vectorial wavefront holography based on a polarisation-insensitive hologram, *J. Opt.* 24, 064008 (2022).
19. †H. Ren, and †S. A. Maier, Nanophotonic materials for twisted-light manipulation, *Adv. Mater.* 2106692 (2022).
20. X. Fang, H. Ren, K. Li, H. Luan, Y. Hua, Q. Zhang, X. Chen, and †M. Gu, Nanophotonic manipulation of optical angular momentum for high-dimensional information optics, invited review in *Adv. Opt. Photonics* 13, 772-833 (2021).
21. †, †H. Ren, †X. Wang, C. Li, C. He, Y. Wang, †A. Pan, and †S. A. Maier, An orbital angular momentum-controlled hybrid nanowire circuit, *Nano Lett.* 21, 6220-6227 (2021).
22. †X. Wang, †C. Liu, C. Gao, K. Yao, S. Shayan M. Masouleh, R. Berté, H. Ren, L. D. S. Menezes, E. Cortés, I. Bicket, H. Wang, N. Li, Z. Zhang, M. Li, W. Xie, Y. Yu, Y. Fang, S. Zhang, H. Xu, A. Vomiero, †Y. Liu, †G. Botton, †S. A. Maier, and †H. Liang, Self-constructed multiple plasmonic hotspots on an individual fractal to amplify broadband hot electron generation, *ACS Nano* 15, 10553-10564 (2021).
23. †Marco Piccardo, Vincent Ginis, Andrew Forbes, Simon Mahler, Haoran Ren, Ahmed H. Dorrah, Firehun T. Dullo, Antonio Ambrosio, Sylvain Gigan, Markus Hiekkamäki, Massimo Brambilla, Alessandra Gatti, Asher Friesem, Nir Davidson, Federico Capasso, Balpreet Singh Ahluwalia, Nicolas Treps, Robert Fickler, Michael Kues, David Moss, Roberto Morandotti, Johann Riemensberger, Tobias Kippenberg, Jerome Faist, Giacomo Scalari, Theodor W Hansch, Giulio Cerullo, Cristian Manzoni, Luigi A Lugiato, Franco Prati, Abbas Shiri, A Abouraddy, Andrea Alu,

- Emanuele Galiffi, John Pendry, Lorenzo Columbo, Paloma Arroyo-Huidobro and Nathalie Picque, Roadmap on multimode light shaping, invited Roadmap article in *J. Opt.* 24, 013001 (2021). <https://doi.org/10.1088/2040-8986/ac3a9d>.
24. P. Kestic, †F. Ligmajer, M. Hrtun, H. Ren, L. S. Menezes, S. A. Maier, and T. Sikola, Optically tunable Mie-resonance VO₂ nanoantennas for metasurfaces in the visible, *ACS Photonics* 8, 1048-1057 (2021).
 25. M. Zhang, †H. Ren, X. Ouyang, M. Jiang, Y. Lu, Y. Hu, S. Fu, Z. Li, Z. Chen, B. Guan, Y. Cao, and †X. Li, Nanointerferometric discrimination of the spin-orbit Hall effect, *ACS Photonics* 8, 1169-1174 (2021).
 26. M. Plidschun, H. Ren, J. Kim, R. Forster, S. A. Maier, and †M. A. Schmidt, Ultra-high numerical aperture meta-fiber for flexible optical trapping, *Light Sci. Appl.* 10, 57 (2021). Doi: 10.1038/s41377-021-00491-z.
 27. A. Aigner, S. A. Maier, and †H. Ren, Topological-insulator-based gap-surface plasmon metasurfaces, *Photonics* 8, 40 (2021) (Cover image, Invited).
 28. C. Li, S. A. Maier, and †H. Ren, Optical vortices in nanophotonics, invited review in *Chinese Optics* (2021). doi: 10.37188/CO.EN.2021-0066.
 29. †, †H. Ren, †X. Fang, †J. Jang, J. Burger, †J. Rho, and †S. A. Maier, Complex-amplitude metasurface-based orbital angular momentum holography in momentum space, *Nat. Nanotechnol.* 15, 948-955 (2020).
 30. H. Ren, W. Shao, Y. Li, F. Salim, and †M. Gu, Three-dimensional vectorial holography based on machine learning inverse design, *Sci. Adv.* 6, eaaz4261 (2020).
 31. †X. Fang, †H. Ren, and †M. Gu, Orbital angular momentum holography for high-security encryption, *Nat. Photonics* 14, 102-108 (2020).
 32. Y. Xie, P. Ni, Q. Wang, †Q. Kan, G. Briere, P. Chen, Z. Zhao, A. Delga, H. Ren, H. Chen, †C. Xu, and †P. Genevet, Metasurface-integrated vertical cavity surface-emitting lasers for programmable directional lasing emissions, *Nat. Nanotechnol.* 15, 125-130 (2020).
 33. †H. Ren, G. Briere, X. Fang, P. Ni, R. Sawant, S. Heron, S. Chenot, S. Veizian, B. Damilano, V. Brandli, S. A. Maier, and †P. Genevet, *Nat. Commun.* 10, 2986 (2019).
 34. †M. Gu, X. Fang, H. Ren, and E. Goi, Optically Digitalized Holography: A Perspective for All-Optical Machine Learning, *Engineering* 5, 363—365 (2019).
 35. †Z. Yue, †H. Ren, S. Wie, J. Lin, and †M. Gu, Angular-momentum nanometrology in an ultrathin plasmonic topological insulator film, *Nat. Commun.* 9, 4413 (2018).
 36. H. Ren, and †M. Gu, Angular momentum-reversible near-unity bisignate circular dichroism, *Laser Photonics Rev.* 12, 1700255 (2018).
 37. H. Ren, X. Li, Q. Zhang, and †M. Gu, On-chip noninterference angular momentum multiplexing of broadband light, *Science* 352, 805-809 (2016).
 38. M. Pu, X. Li, X. Ma, Y. Wang, Z. Zhao, C. Wang, C. Hu, P. Gao, C. Huang, H. Ren, X. Li, F. Qin, J. Yang, M. Gu, M. Hong, and †X. Luo, Catenary optics for achromatic generation of perfect optical angular momentum, *Sci. Adv.* 1, e1500396 (2015).
 39. †X. Li, H. Ren, X. Chen, J. Liu, Q. Li, C. Li, G. Xue, J. Jia, L. Cao, A. Sahu, B. Hu, Y. Wang, G. Jin, and †M. Gu, *Nat. Commun.* 6, 6984 (2015).
 40. H. Ren, X. Li, and †M. Gu, Polarization-multiplexed multifocal arrays by a pi-phase-step-modulated azimuthally polarized beam, *Opt. Lett.* 39, 6771-6774 (2014).
 41. X. Li, P. Venugopalan, H. Ren, M. Hong, and †M. Gu, Super-resolved pure-transverse focal fields with an enhanced energy density through focus of an azimuthally polarized first-order vortex beam, *Opt. Lett.* 39, 5961-5964 (2014).
 42. H. Ren, H. Lin, X. Li, and †M. Gu, Three-dimensional parallel recording with a Debye diffraction-limited and aberration-free volumetric multifocal array, *Opt. Lett.* 39, 1621-1624 (2014).

CONFERENCE PRESENTATIONS

INVITED

43. H. Ren, Generation of arbitrary structured light on metafibres, SPIE Photonics West, San Francisco (2024).
44. H. Ren and S. A. Maier, Nanophotonic chips for twisted light manipulation, SPIE Photonics West, San Francisco (2024).
45. H. Ren, Twisted light holography with metasurfaces, Optical Imaging Congress, Flat Optics: Components to Systems, Boston (2023).
46. H. Ren and S. A. Maier, Spin- and orbital-angular-momentum-selective metasurfaces, *MRS Fall US* (2023).
47. H. Ren, Arbitrary structured light on metafibres, *Structured Light Workshop Singapore* (2023).
48. H. Ren and S. A. Maier, Inverse design of 3D vectorial holography: a platform for realising arbitrary optical skyrmions, *PIERS* (2023).
49. H. Ren and S. A. Maier, 3D meta-optics: a new platform for wavefront shaping and optical sensing, *PIERS* (2023).
50. H. Ren, 3D meta-optics: Principles, Fabrication, and Applications, *CLEO US* (2023).
51. H. Ren, Metafibre optics, Workshop on 3D printing of Photonics Materials, *AIP Congress* (2022).
52. H. Ren, 3D meta-optics: a new platform for wavefront shaping and optical sensing, *ANZCOP* (2022).
53. A. Aigner, J. Wang, A. Tittl, S. A. Maier, and H. Ren, Out-of-plane symmetry-protected bound states in the continuum, *META Conference* (2022).
54. H. Ren, 3D meta-optics for twisted light holography and on-fibre wavefront control, *2022 International Conference on Optical Instrument & Technology* (2022).
55. H. Ren, Holography with a twist, *SPIE Photonics West* (2022).
56. H. Ren, S. A. Maier, Direct laser writing of 3D meta-optics for metasurface applications, *SPIE Photonics West* (2022).
57. A. Aigner, S. A. Maier, and H. Ren, Topological-insulator-based gap-surface-plasmon metasurfaces, *International Conference on Materials Science and Engineering* (2021).
58. H. Ren, and S. A. Maier, Complex-amplitude metasurfaces for orbital angular momentum multiplexing holography, *CLEOPR* (2020). (**Post-deadline**).
59. M. Gu, and H. Ren, Nanoplasmonic multiplexing of optical angular momentum from the visible to terahertz range, *SPIE Optics + Photonics* (2017).

CONTRIBUTED

60. Z. Xie, H. Yu, R. Bedford, C. Li, S. A. Maier, and H. Ren, Inverse design of a wavelength-demultiplexing meta-waveguide, *Koala Conference* (2023).
61. J. Ward, C. Li, W. Lu, S. A. Maier, and H. Ren, Inverse design of actively switchable nanophotonic waveguide devices with phase-change materials, *Koala Conference* (2023).
62. H. Yu, Z. Xie, C. Li, S. A. Maier, and H. Ren, On-chip integrated guided wave-driven metalens, *Koala Conference* (2023).
63. H. Ren, Robustness of optical skyrmions, *ANZCOP* (2023).
64. A. Aigner, A. Tittl, J. Wang, T. Weber, Y. Kivshar, S. A. Maier, and H. Ren, Plasmonic bound states in the continuum to tailor light-matter coupling, *SPIE Optics and Photonics* (2023).
65. M. Schmidt, H. Schneidewind, U. Huebner, M. Zeisberger, M. Plidschun, J. Kim, O. Yermako, Y. Kivshar, A. Bogdanov, H. Ren, and S. A. Maier, Merging nanophotonics with optical fibres through 3D nanoprinting: a novel platform for flexible beam manipulation, *META2023 Conference*.

66. H. Ren, J. Jang, C. Li, A. Aigner, M. Plidschun, J. Kim, J. Rho, M. A. Schmidt, and S. A. Maier, Metafibre optics: principles, fabrication, and applications, AMN10 (2023).
67. I. Vincon, F. J. Wendisch, D. d. Gregorio, S. D. Pritzl, Q. A. Akkerman, H. Ren, L. d S. Menezes, S. A. Maier, and J. Feldmann, Controlling the interaction of perovskite nanocrystals with circularly polarized light, MATSUS23 (2023).
68. H. Ren, J. Jang, C. Li, A. Aigner, M. Plidschun, J. Kim, J. Rho, M. A. Schmidt, and S. A. Maier, An achromatic metafiber for focusing and imaging across the entire telecommunication range, ANZCOP (2022).
69. J. Jang, H. Ren, C. Li, J. Rho, M. A. Schmidt, and S. A. Maier, A dispersion-engineered metafiber for broadband and polarization-insensitive focusing and imaging over the entire telecommunication range, SPIE Nanoscience + Engineering (2022).
70. I. Vincon, F. Wendisch, D. D. Gregorio, S. D. Pritzl, Q. A. Akkerman, A. Dey, H. Ren, L. D. S. Menezes, S. A. Maier, and J. Feldmann, Controlling the nonlinear excitation of perovskite nanocrystals by a chiral dielectric metasurface, EOSAM (2022).
71. I. Vincon, F. Wendisch, D. D. Gregorio, S. D. Pritzl, Q. A. Akkerman, A. Dey, H. Ren, L. D. S. Menezes, S. A. Maier, and J. Feldmann, Controlling the interaction of perovskite nanocrystals with circularly polarized light, DPC (2022).
72. M. A. Schmidt, H. Schneidewind, U. Hübner, M. Zeisberger, M. Plidschun, J. Kim, O. Yermakov, Y. Kivshar, A. Bogdanov, H. Ren, S. A. Maier, Metasurfaces meet optical fibers: a novel platform for flexible optical trapping and boosting in-coupling efficiencies, META2022 Conference.
73. L. Kühner, L. Sortino, R. Berté, J. Wang, H. Ren, S. A. Maier, Y. S. Kivshar, and A. Tittl, Radial bound states in the continuum for polarization-invariant nanophotonics, META2022 Conference.
74. P. Kepic, F. Ligmajer, M. Hrton, H. Ren, L. de S. Menezes, S. A. Maier, and T. Sikola, Exploiting Mie resonances in VO₂ nanoantennas for achieving optically tunable metasurfaces in the visible range, META2022 Conference.
75. C. Li, M. A. Schmidt, S. A. Maier, and H. Ren, All-on-fiber generation of higher-order Poincaré sphere beams via 3D laser-nanoprinted metasurfaces, META2022 Conference (2022).
76. T. Dinter, L. Kühner, C. Li, T. Weber, A. Tittl, S. A. Maier, J. M. Dawes, and H. Ren, Metasurface measuring twisted light in turbulence, CLEO PR conference (2022).
77. A. Aigner, J. Wang, A. Tittl, S. A. Maier, and H. Ren, Out-of-plane symmetry-protected bound states in the continuum in a plasmonic nanofin metasurface, CLEO PR conference (2022).
78. H. Ren, 3D meta-optics for twisted light holography and molecular sensing, MRS Spring Meeting (2022) (oral).
79. J. Jang, H. Ren, M. A. Schmidt, S. A. Maier, and J. Rho, A dispersion-engineered metafiber for broadband and polarization-insensitive focusing and imaging over the entire telecommunication range, SPIE Nanoscience and Engineering (2022).
80. A. Aigner, H. Ren, A. Tittle, and S. A. Maier, Bound states in the continuum in nano-fin metasurfaces, Nanometa conference (2022).
81. A. Aigner, A. Tittl, S. A. Maier, and H. Ren, Out-of-plane symmetry-broken bound state in the continuum in plasmonic metasurfaces, SPIE Europe (2022).
82. L. Kühner, L. Sortino, R. Berté, J. Wang, H. Ren, S. A. Maier, Y. S. Kivshar, and A. Tittl, Radial bound states in the continuum for polarization-invariant nanophotonics, SPIE Europe (2022).
83. M. A. Schmidt, H. Schneidewind, U. Hübner, M. Zeisberger, O. Yermakov, Y. Kivshar, and A. Bogdanov, H. Ren, S. A. Maier, Nanostructures meet fibers: a novel pathway towards boosting in-coupling efficiencies and single-fiber optical trapping, META (2021).
84. H. Ren, and S. A. Maier, 3D meta-optics for high-bandwidth twisted light holography, OSA Imaging and Applied Optics Congress (2021) (oral).
85. L. Kühner, H. Ren, R. Berté, S. A. Maier, Y. S. Kivshar, and A. Tittl, Radial bound states in the continuum, CLEO Europe (2021) (oral).

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