Joel Yuen-Zhou

List of Publications by Year
in descending order

36 papers	2,304 citations	257450 24 h-index	361022 35 g-index
40 all docs	40 docs citations	40 times ranked	1225 citing authors

#	Article	IF	Citations
1	Polariton chemistry: controlling molecular dynamics with optical cavities. Chemical Science, 2018, 9, 6325-6339.	7.4	403
2	Theory for polariton-assisted remote energy transfer. Chemical Science, 2018, 9, 6659-6669.	7.4	158
3	Resonant catalysis of thermally activated chemical reactions with vibrational polaritons. Nature Communications, 2019, 10, 4685.	12.8	144
4	Two-dimensional infrared spectroscopy of vibrational polaritons. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4845-4850.	7.1	143
5	Intermolecular vibrational energy transfer enabled by microcavity strong lightâ€“matter coupling. Science, 2020, 368, 665-667.	12.6	131
6	Inverting singlet and triplet excited states using strong light-matter coupling. Science Advances, 2019, 5, eaax4482.	10.3	116
7	Polariton-Assisted Singlet Fission in Acene Aggregates. Journal of Physical Chemistry Letters, 2018, 9, 1951-1957.	4.6	106
8	Manipulating molecules with strong coupling: harvesting triplet excitons in organic exciton microcavities. Chemical Science, 2020, 11, 343-354.	7.4	98
9	Can Ultrastrong Coupling Change Ground-State Chemical Reactions?. ACS Photonics, 2018, 5, 167-176.	6.6	95
10	Polaritonic normal modes in transition state theory. Journal of Chemical Physics, 2020, 152, 161101.	3.0	75
11	Theory for Nonlinear Spectroscopy of Vibrational Polaritons. Journal of Physical Chemistry Letters, 2018, 9, 3766-3771.	4.6	72
12	Remote Control of Chemistry in Optical Cavities. CheM, 2019, 5, 1167-1181.	11.7	68
13	Plexciton Dirac points and topological modes. Nature Communications, 2016, 7, 11783.	12.8	66
14	State-Selective Polariton to Dark State Relaxation Dynamics. Journal of Physical Chemistry A, 2019, 123, 5918-5927.	2.5	65
15	Catalysis by Dark States in Vibropolaritonic Chemistry. Physical Review Letters, 2022, 128, 096001.	7.8	62
16	Manipulating optical nonlinearities of molecular polaritons by delocalization. Science Advances, 2019, 5, eaax5196.	10.3	57
17	Topologically protected excitons in porphyrin thinÂfilms. Nature Materials, 2014, 13, 1026-1032.	27.5	55
18	Triplet harvesting in the polaritonic regime: A variational polaron approach. Journal of Chemical Physics, 2019, 151, .	3.0	50

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19	Polariton chemistry: Thinking inside the (photon) box. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5214-5216.	7.1	48
20	Polariton Chemistry: Action in the Dark. ACS Central Science, 2019, 5, 386-388.	11.3	36
21	Microcavity-like exciton-polaritons can be the primary photoexcitation in bare organic semiconductors. Nature Communications, 2021, 12, 6519.	12.8	32
22	Nonequilibrium effects of cavity leakage and vibrational dissipation in thermally activated polariton chemistry. Journal of Chemical Physics, 2021, 154, 084108.	3.0	30
23	Polariton Assisted Down-Conversion of Photons via Nonadiabatic Molecular Dynamics: A Molecular Dynamical Casimir Effect. Journal of Physical Chemistry Letters, 2020, 11, 152-159.	4.6	28
24	Enhanced optical nonlinearities under collective strong light-matter coupling. Physical Review A, 2021, 103, .	2.5	28
25	Polariton chemistry: Molecules in cavities and plasmonic media. Journal of Chemical Physics, 2022, 156, 030401.	3.0	20
26	Driving chemical reactions with polariton condensates. Nature Communications, 2022, 13, 1645.	12.8	19
27	Molecular Emission near Metal Interfaces: The Polaritonic Regime. Journal of Physical Chemistry Letters, 2018, 9, 6511-6516.	4.6	17
28	Generalization of the Tavisâ€"Cummings model for multi-level anharmonic systems: Insights on the second excitation manifold. Journal of Chemical Physics, 2022, 156, .	3.0	16
29	Optical Activity from the Exciton Aharonovâ€"Bohm Effect: A Floquet Engineering Approach. Journal of Physical Chemistry C, 2020, 124, 4206-4214.	3.1	7
30	Enantioselective Topological Frequency Conversion. Journal of Physical Chemistry Letters, 2022, 13, 2434-2441.	4.6	6
31	Vibronic Ground-State Degeneracies and the Berry Phase: A Continuous Symmetry Perspective. Journal of Physical Chemistry Letters, 2018, 9, 242-247.	4.6	4
32	Comment on â€˜Quantum theory of collective strong coupling of molecular vibrations with a microcavity modeâ€™. New Journal of Physics, 2018, 20, 018002.	2.9	4
33	Continuous vibronic symmetries in Jahnâ€"Teller models. Journal of Physics Condensed Matter, 2018, 30, 333001.	1.8	3
34	Introduction to Vibropolaritons: Spectroscopy, Relaxation and Chemical Reactions. , 2022, , 517-574.		2
35	Computational method for highly constrained molecular dynamics of rigid bodies: Coarse-grained simulation of auxetic two-dimensional protein crystals. Journal of Chemical Physics, 2020, 152, 244102.	3.0	0
36	Controlling chemistry with vibrational polaritons. , 2019, , .		0