Kun Gao

List of Publications by Year in Descending Order

38 papers	313 citations	10 h-index	16 g-index
39 ext. papers	360 ext. citations	3.9 avg, IF	3.55 L-index

#	Paper	IF	Citations
38	Rationalizing charge carrier transport in ternary organic solar cells. *Applied Physics Letters*, **2022**, 120, 023302	3.4	1
37	Aggregation effect of acceptor molecules on the energy and charge transfer dynamics at an organic donor/acceptor interface. *Organic Electronics*, **2022**, 100, 106396	3.5	1
36	Observing halogen-bond-assisted electron transport in high-performance polymer solar cells. *Applied Physics Letters*, **2021**, 119, 183302	3.4	1
35	Re-excitation dynamics of a □old□ charge transfer state at organic donor/acceptor interfaces. *Applied Physics Letters*, **2021**, 118, 133301	3.4	3
34	Synergistic effect of incorporating intra- and inter-molecular charge transfer in nonfullerene acceptor molecules for highly-efficient organic solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 16834-16840	12	7
33	Migration dynamics of excitons/biexcitons induced by a funnel-like nonuniform compression strain over organic polymers. *Applied Physics Letters*, **2021**, 119, 263302	3.4	
32	Energy and charge transfer dynamics at an organic donor/acceptor interface. *Organic Electronics*, **2020**, 85, 105886	3.5	5
31	Energy Loss in Organic Solar Cells: Mechanisms, Strategies, and Prospects. *Solar Rrl*, **2020**, 4, 2000130	7.1	36
30	Sub-bandgap photoexcited dynamics at an organic donor/acceptor photovoltaic interface. *Optics Letters*, **2020**, 45, 4492-4495	3	0
29	Exciton-to-Charge Dynamics Driven by the Nonuniform Polymer Packing at Donor/Acceptor Interfaces. *Journal of Physical Chemistry C*, **2020**, 124, 1898-1906	3.8	3
28	Directional and ultrafast migrations of excitons/biexcitons in organic polymers by utilizing a local nonuniform electric field. *Journal of Materials Chemistry C*, **2020**, 8, 11274-11281	7.1	2
27	Efficient quantum theory for studying cold charge-transfer state dissociations in donor□cceptor heterojunction organic solar cells. *Applied Physics Letters*, **2020**, 117, 123301	3.4	5
26	Competition between singlet fission and singlet exciton dissociation at the interface in TIPS-pentacene:IT-4F blend. *Organic Electronics*, **2019**, 71, 296-302	3.5	6
25	Dynamical Simulations of Polaron Spin-Filtering and Rectification in an Organic Magnetic□Nonmagnetic Co-oligomer: The Interfacial Effect. *Journal of Physical Chemistry C*, **2019**, 123, 14432-14438	3.8	2
24	Ultrafast Charge Separation from a □old□ Charge-Transfer State Driven by Nonuniform Packing of Polymers at Donor/Acceptor Interfaces. *Journal of Physical Chemistry C*, **2019**, 123, 2746-2754	3.8	7
23	Effect of the third component on charge transfer character in ternary organic solar cells with a cascade-type electronic structure. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2019**, 383, 126001	2.3	4
22	Thermally Induced Exciton Diffusion and Dissociation in Organic Semiconductors. *Journal of Physical Chemistry C*, **2019**, 123, 28527-28532	3.8	3

21	Temperature effect on the internal conversion dynamics following different stimulated absorptions in a conjugated polymer. *Organic Electronics*, **2018**, 56, 201-207	3.5	1
20	Charge Separation from a "Cold" Charge-Transfer State Driven by a Nonuniform Electric Field in Polymer-Based Donor/Acceptor Heterojunctions. *Journal of Physical Chemistry C*, **2018**, 122, 20676-20683	3.8	9
19	Ultrafast Exciton Migration and Dissociation in π-Conjugated Polymers Driven by Local Nonuniform Electric Fields. *Journal of Physical Chemistry C*, **2017**, 121, 20546-20552	3.8	15
18	Exciton transport in π-conjugated polymers with conjugation defects. *Physical Chemistry Chemical Physics*, **2017**, 19, 24971-24978	3.6	14
17	Effect of intrachain configuration disorder on the exciton delocalization in π-conjugated polymers. *Organic Electronics*, **2017**, 48, 342-347	3.5	3
16	Migration of an exciton in organic polymers driven by a nonuniform internal electric field. *Organic Electronics*, **2016**, 30, 171-175	3.5	4
15	Study on the internal conversion dynamics following different electron transfer at a donor/acceptor polymer heterointerface. *Organic Electronics*, **2016**, 28, 73-81	3.5	10
14	Spin polarization of excitons in organic multiferroic composites. *Scientific Reports*, **2016**, 6, 28656	4.9	11
13	Exciton intrachain transport induced by interchain packing configurations in conjugated polymers. *Physical Chemistry Chemical Physics*, **2015**, 17, 18600-5	3.6	9
12	Realization of the population inversion in a conjugated polymer by a single or double stimulating pulse. *Organic Electronics*, **2014**, 15, 1965-1971	3.5	0
11	Voltage Dependence of Magnetoconductance in Organic Semiconductor Devices. *Applied Physics Express*, **2013**, 6, 021603	2.4	
10	Dynamical study on the stimulated processes of an exciton and a biexciton in a polymer. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2013**, 377, 1499-1502	2.3	1
9	Biexcitons generation in a polymer by a femtosecond electric pump pulse. *Organic Electronics*, **2012**, 13, 784-788	3.5	5
8	Study on charge-transfer state in a donor–acceptor polymer heterojunction. *Organic Electronics*, **2011**, 12, 1010-1016	3.5	25
7	Dynamics of interchain delocalized polarons in polymers. *Science China: Physics, Mechanics and Astronomy*, **2010**, 53, 315-320	3.6	3
6	A theoretical study on photoexcitations in poly(p-phenylene vinylene). *Organic Electronics*, **2009**, 10, 1601-1605	3.5	15
5	Intrachain polaron motion and geminate combination in donor-acceptor copolymers: Effects of level offset and interfacial coupling. *Physical Review B*, **2008**, 78,	3.3	23
4	Exciton formation with interchain couplings in organic polymers. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2008**, 372, 2490-2495	2.3	21

3	Charge carrier generation through reexcitations of an exciton in poly(p-phenylene vinylene) molecules. *Physical Review B*, **2007**, 75,	3.3	34
2	Polaron formation dynamics in conducting polymers. *Synthetic Metals*, **2007**, 157, 380-385	3.6	13
1	Reverse polarization in charged pi-conjugated oligomers. *Journal of Chemical Physics*, **2005**, 123, 234702	3.9	9