Piotr Petelenz

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/230025/publications.pdf

Version: 2024-02-01

59 papers	860 citations	430874 18 h-index	501196 28 g-index
60 all docs	60 docs citations	60 times ranked	423 citing authors

#	Article	IF	Citations
1	Charge-transfer excitons in anthracene crystals. A theoretical investigation of their optical absorption and thermal dissociation. Chemical Physics, 1981, 63, 303-320.	1.9	83
2	Theoretical calculation of the electroabsorption spectra of polyacene crystals. Journal of Chemical Physics, 1996, 105, 4427-4440.	3.0	74
3	Reconsideration of the electroabsorption spectra of the tetracene and pentacene crystals. Chemical Physics, 1988, 119, 25-39.	1.9	53
4	Theoretical interpretation of the electroabsorption spectrum of fullerene films. Journal of Chemical Physics, 1998, 109, 7932-7939.	3.0	40
5	Theoretical calculation of the electro-absorption spectrum of the Î±-sexithiophene single crystal. Journal of Chemical Physics, 2002, 117, 1328-1335.	3.0	37
6	Vibronic interpretation of the low-energy absorption spectrum of the sexithiophene single crystal. Journal of Chemical Physics, 2000, 113, 11306-11314.	3.0	34
7	Charge-transfer exciton band structure in the fullerene crystal-model calculations. Journal of Chemical Physics, 1998, 109, 7923-7931.	3.0	33
8	Theoretical calculations of the electroabsorption spectra of perylenetetracarboxylic dianhydride. Journal of Chemical Physics, 2003, 118, 1423-1432.	3.0	32
9	Nonlocal polarizabilities in excited states of polyacene crystals. Chemical Physics Letters, 1993, 215, 607-610.	2.6	27
10	Theoretical interpretation of the electroabsorption spectra of polyacene crystals. II. Charge-transfer states. Journal of Chemical Physics, 1999, 111, 7576-7582.	3.0	26
11	Intermediate vibronic coupling in sexithiophene single crystals. II. Three-particle contributions. Journal of Chemical Physics, 2009, 131, 044507.	3.0	25
12	Theoretical interpretation of the electroabsorption spectra of polyacene crystals. I. Role of Frenkel states. Journal of Chemical Physics, 1997, 107, 7114-7119.	3.0	24
13	Charge-Transfer States in Pentacene: Dimer versus Crystal. Journal of Physical Chemistry C, 2015, 119, 14338-14342.	3.1	24
14	Intermediate vibronic coupling in sexithiophene single crystals. Journal of Chemical Physics, 2009, 130, 094705.	3.0	22
15	Charge transfer excitons in perylenetetracarboxylic dianhydride â€“ microelectrostatic calculations. Chemical Physics Letters, 2000, 324, 161-165.	2.6	21
16	Is Dipole Moment a Valid Descriptor of Excited Stateâ€™s Charge-Transfer Character?. Journal of the American Chemical Society, 2013, 135, 17379-17386.	13.7	20
17	Locally Broken Crystal Symmetry Facilitates Singlet Exciton Fission. Journal of Physical Chemistry Letters, 2016, 7, 1913-1916.	4.6	20
18	Electro-absorption spectra of degenerate charge transfer states. Chemical Physics, 1993, 171, 397-405.	1.9	19

#	Article	IF	Citations
19	Polarization energy calculations of charge transfer states in the Î±-sexithiophene crystal. Synthetic Metals, 2000, 109, 97-100.	3.9	16
20	Davydov splitting in the sexithiophene crystal. Chemical Physics Letters, 2001, 343, 139-142.	2.6	15
21	Vibronic interpretation of silicon phthalocyanine dimer absorption spectrum. Molecular Physics, 1973, 25, 237-239.	1.7	14
22	Two-dimensional model of charge transfer excitons in polyacene crystals. Chemical Physics, 1991, 157, 169-182.	1.9	14
23	Intermediate vibronic coupling in charge transfer states: Comprehensive calculation of electronic excitations in sexithiophene crystal. Journal of Chemical Physics, 2011, 134, 224505.	3.0	14
24	Lowest Singlet Exciton in Pentacene: Modern Calculations versus Classic Experiments. ChemPhysChem, 2014, 15, 2801-2809.	2.1	13
25	Is Vibrational Coherence a Byproduct of Singlet Exciton Fission?. Journal of Physical Chemistry C, 2019, 123, 91-101.	3.1	13
26	Spectral shape of intense exciton absorption in oligothiophene crystals. Physical Review B, 2009, 79, .	3.2	12
27	Autoionization of excited Frenkel states in the anthracene crystal. Journal of Chemical Physics, 1994, 100, 4607-4614.	3.0	10
28	Unbound excitonâ€“phonon states in oligothiophene crystals â€“ A model approach for spectroscopic purposes. Chemical Physics, 2008, 343, 100-106.	1.9	10
29	Charge-Transfer Coupling of an Embedded Pentacene Dimer with the Surrounding Crystal Matrix. Journal of Physical Chemistry C, 2015, 119, 28570-28576.	3.1	10
30	Vibronic relaxation energies of acene-related molecules upon excitation or ionization. Physical Chemistry Chemical Physics, 2018, 20, 14061-14071.	2.8	9
31	Electro-absorption spectrum of tetracene. High field measurements on polycrystalline samples. Chemical Physics, 1992, 167, 185-192.	1.9	8
32	Electro-absorption of charge transfer states: effect of sample texture. Chemical Physics, 1992, 167, 377-384.	1.9	8
33	Theoretical interpretation of electro-absorption spectra for intense optical transitions. Physical Review B, 2005, 71, .	3.2	8
34	Mesoscopic disorder in thin film spectra: absorption spectroscopy of sexithiophene. Chemical Physics Letters, 2000, 332, 435-441.	2.6	7
35	Charge-transfer interactionsâ€"their manifestations in electroabsorption spectra. Journal of Luminescence, 2004, 110, 325-331.	3.1	7
36	Polariton effects in electroabsorption of molecular crystals with several molecules in the unit cell â€“ Sexithiophene. Organic Electronics, 2006, 7, 551-560.	2.6	7

#	Article	IF	Citations
37	Intraband relaxation of Frenkel excitons in sexithiophene crystals. Physical Review B, 2009, 80, .	3.2	6
38	Transition dipole moments of charge transfer excitations in one-component molecular crystals. Chemical Physics, 2012, 397, 92-97.	1.9	6
39	Critical Reconsideration of Biphenyl Fluorescence Spectrum. Journal of Chemical Physics, 1972, 57, 5016-5017.	3.0	5
40	Dopantâ€Catalyzed Singlet Exciton Fission. ChemPhysChem, 2017, 18, 149-155.	2.1	5
41	Quasiâ€spherical model for the calculation of rotationally averaged charge transfer integrals in the fullerene crystal. Advanced Materials for Optics and Electronics, 1996, 6, 312-316.	0.4	4
42	Theoretical Estimates of Charge Transfer State Energies in Sexithiophene. Molecular Crystals and Liquid Crystals, 2001, 355, 65-75.	0.3	4
43	SPECTRAL EFFECTS OF MICROSCOPIC AND MESOSCOPIC DISORDER IN ORGANIC FILMS â€" MODEL CALCULATIONS. International Journal of Modern Physics B, 2001, 15, 3651-3655.	2.0	4
44	Microscopic calculation of the electroabsorption spectra of polyacene crystals. Advanced Materials for Optics and Electronics, 1996, 6, 375-378.	0.4	3
45	Effects of microscopic disorder in electroabsorption spectroscopy: Orientational disorder in the fullerene crystal. Journal of Chemical Physics, 2003, 118, 3711-3716.	3.0	2
46	Unusual features of the quaterthiophene electroâ€absorption spectrum. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 85-88.	0.8	2
47	Vibronic coupling in Frenkel and chargeâ€transfer states of oligothiophene crystals. Physica Status Solidi (B): Basic Research, 2011, 248, 408-411.	1.5	2
48	Soft Selection Rules for Femtosecond Pumpâ€“Probe Vibrational Coherence Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 23501-23510.	3.1	2
49	Limitations of Generic Chromophore Concept for Femtosecond Vibrational Coherences. Journal of Physical Chemistry C, 2020, 124, 3529-3535.	3.1	2
50	Integral transform wave functions in the solution of the quantum mechanical three body problem. AIP Conference Proceedings, 1988, , .	0.4	1
51	Charge Transfer States in Polyacene Crystals. Molecular Crystals and Liquid Crystals, 1993, 228, 55-60.	0.3	1
52	Effect of the Coupling with Frenkel States on the Electroaborption Signal of Charge Transfer Excitons. Molecular Crystals and Liquid Crystals, 1998, 324, 205-210.	0.3	0
53	Microscopic calculation of polariton effects in molecular crystals â€" application to sexithiophene electroabsorption spectrum. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3472-3475.	0.8	0
54	From quantum dots and nanocrystals to organic systems and biomolecules: Excitons and excitonic processes on their way from fundamental research to applications. 8th International Conference on Excitonic Processes in Condensed Matter (EXCON '08), Kyoto, Japan, 22-27 June 2008. Physica Status Solidi (B): Basic Research, 2008, 245, 2533-2537.	1.5	0

#	Article	IF	Citations
55	Beyond the strong vibronic coupling approximation - sexithiophene single crystal. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 81-84.	0.8	0
56	Absorption profile and femtosecond intraband relaxation of the intense upper Davydov component in oligothiophenes. Physica Status Solidi (B): Basic Research, 2011, 248, 412-415.	1.5	0
57	Quasiperiodic Energy Dependence of Exciton Relaxation Kinetics in the Sexithiophene Crystal. Journal of Physical Chemistry A, 2014, 118, 9653-9660.	2.5	0
58	Partial atomic multipoles for internally consistent microelectrostatic calculations. Journal of Computational Chemistry, 2017, 38, 2420-2429.	3.3	0
59	SPECTRAL EFFECTS OF MICROSCOPIC AND MESOSCOPIC DISORDER IN ORGANIC FILMS â€" MODEL CALCULATIONS. , 2001, , .		0