Martin Knupfer

List of Publications by Year
in descending order

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123 papers	3,290 citations	159525 30 h-index	168321 53 g-index
124 all docs	124 docs citations	124 times ranked	4720 citing authors

#	Article	IF	Citations
1	Exciton binding energies in organic semiconductors. Applied Physics A: Materials Science and Processing, 2003, 77, 623-626.	1.1	365
2	Graphene Synthesis on Cubic SiC/Si Wafers. Perspectives for Mass Production of Graphene-Based Electronic Devices. Nano Letters, 2010, 10, 992-995.	4.5	199
3	Electronic properties of carbon nanostructures. Surface Science Reports, 2001, 42, 1-74.	3.8	138
4	Novel Catalysts, Room Temperature, and the Importance of Oxygen for the Synthesis of Single-Walled Carbon Nanotubes. Nano Letters, 2005, 5, 1209-1215.	4.5	120
5	Electronic properties of interfaces between model organic semiconductors and metals. Physica Status Solidi A, 2004, 201, 1055-1074.	1.7	119
6	Evidence for a New Twoâ€Dimensional C₄Hâ€Type Polymer Based on Hydrogenated Graphene. Advanced Materials, 2011, 23, 4497-4503.	11.1	90
7	Investigating the Graphitization Mechanism of SiO₂ Nanoparticles in Chemical Vapor Deposition. ACS Nano, 2009, 3, 4098-4104.	7.3	89
8	Mott-Hubbard-like Behavior of the Energy Gap ofA4C60(A=Na,K,Rb,Cs)andNa10C60. Physical Review Letters, 1997, 79, 2714-2717.	2.9	86
9	On-Ball Doping of Fullerenes: The Electronic Structure ofC59N Dimers from Experiment and Theory. Physical Review Letters, 1997, 78, 4249-4252.	2.9	79
10	Orientation and electronic properties of phthalocyanines on polycrystalline substrates. Physica Status Solidi (B): Basic Research, 2009, 246, 1529-1545.	0.7	75
11	The Electronic and Vibrational Structure of Endohedral Tm3N@C80 (I) Fullerene â˜ Proof of an Encaged Tm3+. Journal of Physical Chemistry A, 2005, 109, 7088-7093.	1.1	69
12	Crystal Growth, Structure, and Transport Properties of the Charge-Transfer Salt Picene/2,3,5,6-Tetrafluoro-7,7,8,8-tetracyanoquinodimethane. Crystal Growth and Design, 2014, 14, 1338-1346.	1.4	66
13	Electron energy-loss spectroscopy: A versatile tool for the investigations of plasmonic excitations. Journal of Electron Spectroscopy and Related Phenomena, 2014, 195, 85-95.	0.8	65
14	Programmable Sub-nanometer Sculpting of Graphene with Electron Beams. ACS Nano, 2012, 6, 10327-10334.	7.3	53
15	Effect of Charge Order on the Plasmon Dispersion in Transition-Metal Dichalcogenides. Physical Review Letters, 2011, 107, 176404.	2.9	50
16	Absence of photoemission from the Fermi level in potassium intercalated picene and coronene films: Structure, polaron, or correlation physics?. Journal of Chemical Physics, 2012, 136, 134503.	1.2	50
17	Identification of the electronic states of manganese phthalocyanine close to the Fermi level. Chemical Physics Letters, 2011, 505, 122-125.	1.2	49
18	Investigating the Outskirts of Fe and Co Catalyst Particles in Alumina-Supported Catalytic CVD Carbon Nanotube Growth. ACS Nano, 2010, 4, 1146-1152.	7.3	48

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19	Charge-Injection Barriers at Realistic Metal/Organic Interfaces: Metals Become Faceless. Advanced Materials, 2007, 19, 754-756.	11.1	46
20	Electronic properties of molecular solids: the peculiar case of solid picene. New Journal of Physics, 2010, 12, 103036.	1.2	46
21	Site-Dependent Donation/Backdonation Charge Transfer at the CoPc/Ag(111) Interface. Langmuir, 2012, 28, 13325-13330.	1.6	45
22	Crystal Growth, Dynamic and Charge Transfer Properties of New Coronene Charge Transfer Complexes. Crystal Growth and Design, 2016, 16, 331-338.	1.4	45
23	Momentum dependence of the excitons in pentacene. Journal of Chemical Physics, 2012, 136, 204708.	1.2	43
24	Determination of the Charge Transport Mechanisms in Ultrathin Copper Phthalocyanine Vertical Heterojunctions. Journal of Physical Chemistry C, 2014, 118, 7272-7279.	1.5	39
25	Kinetic Isotope Effect in the Hydrogenation and Deuteration of Graphene. Advanced Functional Materials, 2013, 23, 1628-1635.	7.8	38
26	Electronic structure of pristine CuPc: Experiment and calculations. Applied Surface Science, 2007, 254, 20-25.	3.1	37
27	The complex nature of phthalocyanine/gold interfaces. Applied Surface Science, 2013, 267, 62-65.	3.1	34
28	Initial Growth of Lutetium(III) Bis-phthalocyanine on Ag(111) Surface. Journal of the American Chemical Society, 2011, 133, 5538-5544.	6.6	33
29	Hybrid States and Charge Transfer at a Phthalocyanine Heterojunction:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>MnPc</mml:mi><mml:mrow><mml:mi>Î´</mml:mi><mml:mo>+</mml:mo></mml:mrow></mml:msup><mml:mo>/</mml:mo><mml:msub><mml:mi>F</mml:mi><mml:mn>16</mml:mn></mml:msub><mml:mi>CoPc</mml:mi></mml:mrow><mml:mrow><mml:m Physical Review Letters, 2012, 109, 027601.	2.9	32
30	Interface Fermi Level Pinning at Contacts Between PEDOT:â€‰PSS and Molecular Organic Semiconductors. ChemPhysChem, 2007, 8, 386-390.	1.0	31
31	Frenkel and charge-transfer excitons inC60. Physical Review B, 1999, 60, 10731-10734.	1.1	29
32	Single crystal strontium titanate surface and bulk modifications due to vacuum annealing. Journal of Applied Physics, 2011, 110, .	1.1	29
33	Plasmon dispersion in molecular solids: Picene and potassium-doped picene. Physical Review B, 2011, 84, .	1.1	28
34	Electronic structure of undoped and potassium-doped coronene investigated by electron energy-loss spectroscopy. Physical Review B, 2012, 85, .	1.1	28
35	Ferromagnetic cobalt and iron top contacts on an organic semiconductor: Evidence for a reacted interface. Organic Electronics, 2009, 10, 8-11.	1.4	27
36	Exciton character in picene molecular solids. Physical Review B, 2011, 83, .	1.1	27

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37	Elimination of metal catalyst and carbon-like impurities from single-wall carbon nanotube raw material. Applied Physics A: Materials Science and Processing, 2004, 78, 311-314.	1.1	26
38	Energy level alignment and interface states at Î±-sexithiophene/Ag interfaces. Organic Electronics, 2007, 8, 625-630.	1.4	26
39	Dynamic response and electronic structure of potassium-doped picene investigated by electron energy-loss spectroscopy. Physical Review B, 2011, 83, .	1.1	26
40	Investigation of the dispersion and the effective masses of excitons in bulk<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mi>H</mml:mi><mml:mo>â€’</mml:m transition electron energy-loss spectroscopy. Physical Review B, 2015, 91, .	1.1	26
41	Initial growth at the F16CoPc/Ag(111) interface. Surface Science, 2011, 605, 1510-1515.	0.8	25
42	Integrated molecular diode as 10â€‰MHz half-wave rectifier based on an organic nanostructure heterojunction. Nature Communications, 2020, 11, 3592.	5.8	25
43	Understanding High-Yield Catalyst-Free Growth of Horizontally Aligned Single-Walled Carbon Nanotubes Nucleated by Activated C60 Species. ACS Nano, 2012, 6, 10825-10834.	7.3	24
44	Probing Local Hydrogen Impurities in Quasi-Free-Standing Graphene. ACS Nano, 2012, 6, 10590-10597.	7.3	24
45	Crystalline Organic Heterostructures Engineering Based on Vanadyl Phthalocyanine and Rodâ€Like Conjugated Organic Semiconductors with Selected Central Groups. Advanced Functional Materials, 2012, 22, 4598-4607.	7.8	23
46	Charge transfer at F16CoPc and CoPc interfaces to Au. Applied Physics A: Materials Science and Processing, 2011, 105, 921-925.	1.1	22
47	Electronic properties of the interface between Î±,ï‰-dihexyl-quaterthiophene and gold. Surface Science, 2005, 595, 165-171.	0.8	21
48	Dispersion of a Hole in a Two-DimensionalCu3O4Plane: A Tale of Two Singlets. Physical Review Letters, 1997, 78, 4107-4110.	2.9	19
49	Dispersion of electronâ€“hole excitations in pentacene along (100). Chemical Physics, 2006, 325, 92-98.	0.9	19
50	Quasi-One-Dimensional K-O Chain in PTCDA Thin Films: Evidence from First-Principles Calculations. Physical Review Letters, 2007, 98, 046401.	2.9	18
51	Prediction of the Equilibrium Structures and Photomagnetic Properties of the Prussian Blue Analogue RbMn[Fe(CN)₆] by Density Functional Theory. Journal of Physical Chemistry A, 2008, 112, 5742-5748.	1.1	17
52	Phthalocyanine dimers in a blend: Spectroscopic and theoretical studies of MnPcÎ´+/F16CoPcÎ´â». Journal of Chemical Physics, 2013, 138, 024707.	1.2	17
53	Unoccupied electronic states in an organic semiconductor probed with x-ray spectroscopy and first-principles calculations. Journal of Chemical Physics, 2008, 129, 154705.	1.2	16
54	Loss spectroscopy of molecular solids: combining experiment and theory. New Journal of Physics, 2013, 15, 125024.	1.2	15

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55	Electronic structure and work function of potassium-doped PTCDA thin films. Applied Physics A: Materials Science and Processing, 2006, 84, 329-333.	1.1	14
56	Charge Transfer, Bandâ€Like Transport, and Magnetic Ions at F₁₆CoPc/Rubrene Interfaces. Advanced Materials Interfaces, 2016, 3, 1500863.	1.9	13
57	Particular electronic properties of F16CoPc: A decent electron acceptor material. Journal of Electron Spectroscopy and Related Phenomena, 2017, 215, 1-7.	0.8	13
58	Hydrogen activated axial inter-conversion in SiC nanowires. Journal of Solid State Chemistry, 2009, 182, 602-607.	1.4	12
59	H-aggregated small molecular nanowires as near infrared absorbers for organic solar cells. Organic Electronics, 2017, 45, 198-202.	1.4	12
60	Probing the molecular orbitals of FePc near the chemical potential using electron energy-loss spectroscopy. European Physical Journal B, 2010, 74, 339-344.	0.6	11
61	Hole Transparent and Hole Blocking Transport in Single-Crystal-Like Organic Heterojunction: When Rods Hold up Disks. ACS Applied Materials & Interfaces, 2011, 3, 2195-2199.	4.0	11
62	Electronic excitations of potassium intercalated manganese phthalocyanine investigated by electron energy-loss spectroscopy. Journal of Chemical Physics, 2011, 134, 194504.	1.2	11
63	Comprehensive studies of the electronic structure of pristine and potassium doped chrysene investigated by electron energy-loss spectroscopy. Journal of Chemical Physics, 2012, 137, 114508.	1.2	11
64	Surfactant free fractions of metallic and semiconducting single-walled carbon nanotubes via optimised gel chromatography. Materials Research Bulletin, 2012, 47, 687-691.	2.7	11
65	Encapsulation of the 4-Mercaptobenzoate Ligand by Macrocyclic Metal Complexes: Conversion of a Metallocavitand to a Metalloligand. Inorganic Chemistry, 2014, 53, 10825-10834.	1.9	11
66	Electronic properties of the charge transfer material MnPc/F4TCNQ. Journal of Chemical Physics, 2016, 145, 114702.	1.2	11
67	Charge transfer from and to manganese phthalocyanine: bulk materials and interfaces. Beilstein Journal of Nanotechnology, 2017, 8, 1601-1615.	1.5	11
68	Epitaxial growth and electronic properties of well ordered phthalocyanine heterojunctions MnPc/F16CoPc. Journal of Chemical Physics, 2014, 141, 094706.	1.2	10
69	Low-energy exciton pocket at finite momentum in tetracene molecular solids. Europhysics Letters, 2015, 112, 37004.	0.7	10
70	Negative plasmon dispersion in 2H-NbS₂beyond the charge-density-wave interpretation. New Journal of Physics, 2016, 18, 103050.	1.2	10
71	Electron Transfer and Unusual Chemical Transformations of F4â€TCNQ in a Reaction with Mnâ€Phthalocyanine. European Journal of Inorganic Chemistry, 2018, 2018, 3344-3353.	1.0	10
72	Low-temperature enhancement of ferromagnetic Kitaev correlations in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î±</mml:mi><mml:mo>â^'</mml:mo><mml:mi>Ru</mml:m Physical Review Materials, 2020, 4, .	2.9	10

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73	Bulk quantity and physical properties of boron nitride nanocapsules with a narrow size distribution. Carbon, 2005, 43, 615-621.	5.4	9
74	Electronic properties of spiro compounds for organic electronics. Journal of Chemical Physics, 2012, 136, 124702.	1.2	9
75	STM Study of Au(111) Surface-Grafted Paramagnetic Macrocyclic Complexes [Ni₂L(Hmba)]⁺ via Ambidentate Coligands. Langmuir, 2016, 32, 4464-4471.	1.6	9
76	Mapping of the energetically lowest exciton in bulk<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi><mml:mo>â</mml:m Physical Review B, 2018, 98, .	1.1	9
77	Size and dispersion of excitons in organic semiconductors. Synthetic Metals, 2004, 141, 21-27.	2.1	8
78	Energy Level Alignment and Interactions at Potential Contacts for Spin Injection into Organic Semiconductors. Advanced Engineering Materials, 2009, 11, 285-290.	1.6	8
79	Energy level alignment at interfaces between organic semiconductors and clean ferromagnetic La0.7Sr0.3MnO3 thin film contacts for spin injection. Applied Physics A: Materials Science and Processing, 2009, 95, 95-99.	1.1	8
80	Electronic properties of 1,2;8,9-dibenzopentacene thin films: A joint experimental and theoretical study. Physical Review B, 2012, 86, .	1.1	8
81	Systematic theoretical investigation of the phthalocyanine based dimer: MnPc<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mrow><mml:mi>Î´</mml:mi><mml:mo>+</mml:mo></mml:mrow></mml:msup></mml:math>/F<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>16</mml:mn></mml:msub></mml:math>CoPc<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow />	1.1	8
82	Nonlocal dielectric function and nested dark excitons in MoS2. Npj 2D Materials and Applications, 2019, 3, .	3.9	8
83	Lossâ€spectroscopy on sparse arrays of aligned singleâ€wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2008, 245, 2284-2287.	0.7	7
84	Plasmons and interband transitions ofCa11Sr3Cu24O41investigated by electron energy-loss spectroscopy. Physical Review B, 2010, 82, .	1.1	7
85	Challenging the nature of low-energy plasmon excitations in CaC 6 using electron energy-loss spectroscopy. Europhysics Letters, 2013, 102, 17001.	0.7	7
86	Impact of potassium doping on the electronic structure of tetracene and pentacene: An electron energy-loss study. Journal of Chemical Physics, 2015, 143, 154708.	1.2	7
87	Doping dependent plasmon dispersion in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mi>H</mml:mi></mml:mrow></mml metal dichalcogenides. Physical Review B, 2016, 94, .	1.1	7
88	Formation of sharp metal-organic semiconductor interfaces: Ag and Sn on CuPc. European Physical Journal B, 2007, 57, 379-384.	0.6	6
89	The electronic excitation spectrum of CuPcF16 films. Applied Physics A: Materials Science and Processing, 2009, 94, 179-183.	1.1	6
90	Characterization of the electronic excitations in Alq3 using electron energy-loss spectroscopy. Applied Physics A: Materials Science and Processing, 2009, 94, 31-34.	1.1	6

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91	Chemisorption of Exchangeâ€Coupled [Ni₂L(dppba)]⁺ Complexes on Gold by Using Ambidentate 4â€(Diphenylphosphino)benzoate Coâ€Ligands. Chemistry - A European Journal, 2013, 19, 7787-7801.	1.7	6
92	Toward Synthesis and Characterization of Unconventional C₆₆ and C₆₈ Fullerenes inside Carbon Nanotubes. Journal of Physical Chemistry C, 2014, 118, 30260-30268.	1.5	6
93	Semiconductor-to-metal transition in the bulk of WSe₂upon potassium intercalation. Journal of Physics Condensed Matter, 2017, 29, 165502.	0.7	6
94	Charge-Transfer Complexes of Linear Acenes with a New Acceptor Perfluoroanthraquinone. The Interplay of Charge-Transfer and FÂ·Â·Â·F Interactions. Crystal Growth and Design, 2019, 19, 5123-5131.	1.4	6
95	Charge Transfer at the Interface Between MnPc and F 6 TCNNQ. Physica Status Solidi (B): Basic Research, 2019, 256, 1800245.	0.7	6
96	Strong Photophysical Diversity and the Role of Charge Transfer Excitons in Transition Metal Phthalocyanine Î²-Phases. Journal of Physical Chemistry C, 2021, 125, 12398-12404.	1.5	6
97	Potassium-intercalated bulk <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">HfS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">HfSe</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> : Phase stability, structure, and electronic structure. Physical Review Materials, 2020, 4, .	0.9	6
98	Energy-level alignment at interfaces between manganese phthalocyanine and C₆₀. Beilstein Journal of Nanotechnology, 2017, 8, 927-932.	1.5	5
99	Investigation of indirect excitons in bulk 2H-MoS₂using transmission electron energy-loss spectroscopy. Journal of Physics Condensed Matter, 2018, 30, 205502.	0.7	5
100	Complex momentum behavior of electronic excitations in Î²-CuPc. Journal of Chemical Physics, 2018, 149, 084704.	1.2	5
101	Charge transfer characteristics of F 6 TCNNQâ€“gold interface. Surface and Interface Analysis, 2020, 52, 953-956.	0.8	5
102	Photoelectron Spectroscopy on Polycyclic Hydrocarbonâ€“F₆TCNNQ Interfaces. Journal of Physical Chemistry C, 2020, 124, 2961-2967.	1.5	5
103	Investigation of potassium-intercalated bulk<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> transmission electron energy-loss spectroscopy. Physical Review B, 2020, 101, .	1.1	5
104	Electronic properties of Mn-phthalocyanineâ€“C60 bulk heterojunctions: Combining photoemission and electron energy-loss spectroscopy. Journal of Applied Physics, 2015, 118, .	1.1	4
105	Optical Anisotropy and Momentum-Dependent Excitons in Dibenzopentacene Single Crystals. ACS Omega, 2022, 7, 21183-21191.	1.6	4
106	Electronic structure of 1,3,5-trithia-2,4,6-triazapentalenyl on gold. Chemical Physics Letters, 2008, 451, 58-62.	1.2	3
107	How Photoelectron Spectroscopy and Quantum Chemical Studies Can Help Understanding the Magnetic Properties of Molecules: An Example from the Class of Cu(II)â€Bis(oxamato) Complexes. Journal of Physical Chemistry B, 2009, 113, 10051-10054.	1.2	3
108	An electron energy-loss study of picene and chrysene based charge transfer salts. Journal of Chemical Physics, 2015, 142, 184702.	1.2	3

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109	Unscreened plasmon dispersion of2Htransition metal dichalcogenides. Physical Review B, 2017, 95, .	1.1	3
110	An unusual donorâ€“acceptor system Mn^{II}Pc-TCNQ/F₄-TCNQ and the properties of the mixed single crystals of metal phthalocyanines with organic acceptor molecules. Dalton Transactions, 2019, 48, 17252-17257.	1.6	3
111	Evidence for an orbital dependent Mott transition in the ladders of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mi>La</mml:mi></mml:mrow> ma. Physical Review B, 2020, 101, .	1.1	3
112	New charge-transfer states in blends of ZnPC with F8ZnPC. AIP Advances, 2021, 11, 025230.	0.6	3
113	Photoemission Study of Charge Transfer between ET (BEDT-TTF) and Acceptors F₆TCNNQ and F₂TCNQ. Journal of Physical Chemistry C, 2021, 125, 18961-18967.	1.5	3
114	Surface functionalization of WSe₂ by F₁₆CoPc. Physica Status Solidi (B): Basic Research, 2017, 254, 1600656.	0.7	2
115	Exciton dispersion in para-quaterphenyl: Significant molecular interactions beyond Coulomb coupling. AIP Advances, 2021, 11, 095313.	0.6	2
116	Evolution of Structure and Electronic Correlations in a Series of BaT₂As₂ (T) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.9	2
117	Electronic excitation spectrum of doped organic thin films investigated using electron energy-loss spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2015, 204, 23-28.	0.8	1
118	Synthesis and charge transfer characteristics of a rutheniumâ€“acetylide complex. RSC Advances, 2020, 10, 43242-43247.	1.7	1
119	Supramolecular chirality in the crystals of mononuclear and polymeric cobalt(ii) complexes with enantiopure and racemic N-thiophosphorylated thioureas. CrystEngComm, 2021, 23, 2081-2090.	1.3	1
120	Anisotropic dynamic response of pentacene single crystals. European Physical Journal B, 2007, 59, 25-28.	0.6	0
121	Electronic excitation spectrum of calcium-doped picene: Electron energy-loss spectroscopy study. Physical Review B, 2013, 88, .	1.1	0
122	Electronic excitations of manganese phthalocyanine molecules. Journal of Chemical Physics, 2018, 148, 044701.	1.2	0
123	Evolution of the charge carrier plasmon in the one-dimensional metal TTF-TCNQ as a function of temperature and momentum. Materials Research Express, 2019, 6, 106319.	0.8	0