

# Tatiana G Rappoport

## List of Publications by Year in descending order

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Version: 2024-02-01

51

papers

1,196

citations

430874

18

h-index

377865

34

g-index

51

all docs

51

docs citations

51

times ranked

1489

citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Orbital Hall effect in bilayer transition metal dichalcogenides: From the intra-atomic approximation to the Bloch states orbital magnetic moment approach. <i>Physical Review B</i> , 2022, 105, .          | 3.2  | 11        |
| 2  | Disentangling Orbital and Valley Hall Effects in Bilayers of Transition Metal Dichalcogenides. <i>Physical Review Letters</i> , 2021, 126, 056601.  | 7.8  | 55        |
| 3  | Topological Graphene Plasmons in a Plasmonic Realization of the Suâ€“Schriefferâ€“Heeger Model. <i>ACS Photonics</i> , 2021, 8, 1817-1823.  | 6.6  | 15        |
| 4  | Decoding the DC and optical conductivities of disordered MoS <sub>2</sub> films: an inverse problem. <i>New Journal of Physics</i> , 2021, 23, 073035.  | 2.9  | 2         |
| 5  | Orbital magnetoelectric effect in zigzag nanoribbons of $\text{p}$ -band systems. <i>Physical Review B</i> , 2021, 104, .   | 3.2  | 13        |
| 6  | Cysne etÂal. Reply:. <i>Physical Review Letters</i> , 2021, 127, 149702.  | 7.8  | 1         |
| 7  | Understanding the Electromagnetic Response of Graphene/Metallic Nanostructures Hybrids of Different Dimensionality. <i>ACS Photonics</i> , 2020, 7, 2302-2308.  | 6.6  | 15        |
| 8  | KITE: high-performance accurate modelling of electronic structure and response functions of large molecules, disordered crystals and heterostructures. <i>Royal Society Open Science</i> , 2020, 7, 191809. | 2.4  | 30        |
| 9  | Far-field excitation of single graphene plasmon cavities with ultracompressed mode volumes. <i>Science</i> , 2020, 368, 1219-1223.  | 12.6 | 114       |
| 10 | Two-dimensional orbital Hall insulators. <i>Physical Review B</i> , 2020, 101, .  | 3.2  | 26        |
| 11 | Orbital Hall insulating phase in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2020, 101, .  | 3.2  | 45        |
| 12 | Topological photonic Tamm states and the Su-Schrieffer-Heeger model. <i>Physical Review A</i> , 2020, 101, .  | 2.5  | 29        |
| 13 | Spin and Charge Transport of Multiorbital Quantum Spin Hall Insulators. <i>Physical Review Letters</i> , 2019, 122, 196601.   | 7.8  | 23        |
| 14 | Quantum Hall effect in graphene with interface-induced spin-orbit coupling. <i>Physical Review B</i> , 2018, 97, .  | 3.2  | 20        |
| 15 | Shubnikovâ€“de Haas oscillations in the anomalous Hall conductivity of Chern insulators. <i>Physical Review B</i> , 2018, 98, .   | 3.2  | 3         |
| 16 | Crystal-field effects in graphene with interface-induced spin-orbit coupling. <i>Physical Review B</i> , 2018, 98, .  | 3.2  | 22        |
| 17 | Kuboâ€“Bastin approach for the spin Hall conductivity of decorated graphene. <i>2D Materials</i> , 2016, 3, 024007.   | 4.4  | 26        |
| 18 | Numerical calculation of the Casimir-Polder interaction between a graphene sheet with vacancies and an atom. <i>Physical Review B</i> , 2016, 94, .   | 3.2  | 15        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Magnetic effects in sulfur-decorated graphene. <i>Scientific Reports</i> , 2016, 6, 21460.   | 3.3 | 11        |
| 20 | Controlling spin polarization in graphene by cloaking magnetic and spin-orbit scatterers. <i>Physical Review B</i> , 2016, 94, .   | 3.2 | 1         |
| 21 | Cloaking resonant scatterers and tuning electron flow in graphene. <i>Physical Review B</i> , 2015, 91, .  | 3.2 | 8         |
| 22 | Real-Space Calculation of the Conductivity Tensor for Disordered Topological Matter. <i>Physical Review Letters</i> , 2015, 114, 116602.                                       | 7.8 | 78        |
| 23 | Extrinsic Spin Hall Effect Induced by Resonant Skew Scattering in Graphene. <i>Physical Review Letters</i> , 2014, 112, 066601.  | 7.8 | 105       |
| 24 | Adatoms and Anderson localization in graphene. <i>Physical Review B</i> , 2014, 90, .  | 3.2 | 13        |
| 25 | Vortex core magnetization dynamics induced by thermal excitation. <i>Applied Physics Letters</i> , 2012, 100, 112404.  | 3.3 | 14        |
| 26 | Incommensurate spin-density-wave and metal-insulator transition in the one-dimensional periodic Anderson model. <i>Physical Review B</i> , 2011, 84, .                         | 3.2 | 2         |
| 27 | Magnetic exchange mechanism for electronic gap opening in graphene. <i>Europhysics Letters</i> , 2011, 96, 27010.  | 2.0 | 8         |
| 28 | Kondo Quantum Criticality of Magnetic Adatoms in Graphene. <i>Physical Review Letters</i> , 2011, 106, 016801.   | 7.8 | 132       |
| 29 | Magnetotransport in nanostructures: The role of inhomogeneous currents. <i>Journal of Applied Physics</i> , 2011, 109, 093904.   | 2.5 | 7         |
| 30 | Superconducting transition in Pb/Co nanocomposites: effect of Co volume fraction and external magnetic field. <i>European Physical Journal B</i> , 2010, 76, 353-357.          | 1.5 | 4         |
| 31 | The effect of impurities on spin-polarized Zeeman bound states in dilute magnetic semiconductor-superconductor hybrids. <i>Journal of Applied Physics</i> , 2010, 107, 034307. | 2.5 | 2         |
| 32 | Ion-beam modification of the magnetic properties of<math>\text{Ga}_{\frac{3}{2}}\text{Mn}_{\frac{1}{2}}</math>. <i>Physical Review B</i> , 2010, 81, .                         | 3.2 | 18        |
| 33 | Magnetism and magnetotransport in disordered graphene. <i>Physical Review B</i> , 2009, 80, .  | 3.2 | 31        |
| 34 | The effect of impurities on spin polarized Zeeman bound states in superconductor &#x2014; Dilute magnetic semiconductor hybrids. , 2009, , .                                   | 0   |           |
| 35 | Controlled switching between paramagnetic and diamagnetic Meissner effects in superconductor-ferromagnet Pb-Co nanocomposites. <i>Physical Review B</i> , 2009, 80, .          | 3.2 | 11        |
| 36 | Static and dynamic properties of vortices in anisotropic magnetic disks. <i>Applied Physics Letters</i> , 2008, 93, 112507.  | 3.3 | 9         |

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|----|--|------|-----------|
| 37 | Spontaneous vortex phases in superconductor-ferromagnet Pb-Co nanocomposite films. Physical Review B, 2008, 78, .  | 3.2  | 16        |
| 38 | Experimental observation of quantum entanglement in low-dimensional spin systems. Physical Review B, 2007, 75, .   | 3.2  | 59        |
| 39 | Semiconductors: Nanostructures and applications in spintronics and quantum computation. AIP Conference Proceedings, 2006, , .                            | 0.4  | 1         |
| 40 | Effect of the Abrikosov vortex phase on spin and charge states in magnetic semiconductor-superconductor hybrids. Physical Review B, 2006, 74, .          | 3.2  | 5         |
| 41 | Manipulating spin and charge in magnetic semiconductors using superconducting vortices. Nature, 2005, 435, 71-75.  | 27.8 | 73        |
| 42 | Ferromagnetic/DMS hybrid structures: one- and zero-dimensional magnetic traps for quasiparticles. AIP Conference Proceedings, 2005, , .                  | 0.4  | 0         |
| 43 | Optical response of a ferromagnetic-diluted magnetic semiconductor hybrid structure. Applied Physics Letters, 2005, 86, 113103.                          | 3.3  | 12        |
| 44 | Zero- and one-dimensional magnetic traps for quasiparticles in diluted magnetic semiconductors. Physical Review B, 2005, 72, .                           | 3.2  | 15        |
| 45 | Anomalous behavior of spin-wave resonances in $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ thin films. Physical Review B, 2004, 69, .                           | 3.2  | 46        |
| 46 | The anisotropic Kondo necklace model. Physica A: Statistical Mechanics and Its Applications, 2004, 344, 644-648.   | 2.6  | 16        |
| 47 | Griffiths phases in the strongly disordered Kondo necklace model. Europhysics Letters, 2003, 61, 831-837.  | 2.0  | 3         |
| 48 | Phase diagram of the Kondo necklace: a mean-field renormalization group approach. Journal of Physics A, 2001, 34, 10829-10837.                           | 1.6  | 5         |
| 49 | Role of disorder on the quantum critical point of a model for heavy fermions. Physical Review B, 2001, 64, .   | 3.2  | 11        |
| 50 | Short-range antiferromagnetic correlations in Kondo insulators. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 264, 497-504. | 2.1  | 11        |
| 51 | Domain Analysis and Magnetic Relaxation in Thin Films. International Journal of Modern Physics C, 1998, 09, 821-825.                                     | 1.7  | 4         |