

# Victor V Moshchalkov

## List of Publications by Year in descending order

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Version: 2024-02-01

76  
papers

1,692  
citations

279798

23  
h-index

289244

40  
g-index

76  
all docs

76  
docs citations

76  
times ranked

2438  
citing authors

#	ARTICLE	IF	CITATIONS
1	Type-1.5 Superconductivity. Physical Review Letters, 2009, 102, 117001.	7.8	230
2	Heterometallic CuII/DyIII 1D chiral polymers: chirogenesis and exchange coupling of toroidal moments in trinuclear Dy <sub>3</sub> single molecule magnets. Chemical Science, 2012, 3, 1169.	7.4	146
3	How Ultranarrow Gap Symmetries Control Plasmonic Nanocavity Modes: From Cubes to Spheres in the Nanoparticle-on-Mirror. ACS Photonics, 2017, 4, 469-475.	6.6	115
4	Directional Fluorescence Emission by Individual V-Antennas Explained by Mode Expansion. ACS Nano, 2014, 8, 8232-8241.	14.6	84
5	Scanning SQUID microscopy of vortex clusters in multiband superconductors. Physical Review B, 2010, 81, .	3.2	64
6	Fast Dynamic Color Switching in Temperature-Responsive Plasmonic Films. Advanced Optical Materials, 2016, 4, 877-882.	7.3	56
7	Electrically Driven Unidirectional Optical Nanoantennas. Nano Letters, 2017, 17, 7433-7439.	9.1	56
8	Wavelength-Dependent Nonlinear Optical Properties of Ag Nanoparticles Dispersed in a Glass Host. Journal of Physical Chemistry C, 2017, 121, 27580-27589.	3.1	45
9	Metal-“Bosonic Insulator”-Superconductor Transition in Boron-Doped Granular Diamond. Physical Review Letters, 2013, 110, 077001.	7.8	44
10	Nanoscale assembly of superconducting vortices with scanning tunnelling microscope tip. Nature Communications, 2016, 7, 13880.	12.8	43
11	Thermal and quantum depletion of superconductivity in narrow junctions created by controlled electromigration. Nature Communications, 2016, 7, 10560.	12.8	41
12	Vortex matter in mesoscopic two-gap superconductor square. Physical Review B, 2011, 84, .	3.2	38
13	Comparison of Hydrodynamic Models for the Electromagnetic Nonlocal Response of Nanoparticles. Advanced Theory and Simulations, 2018, 1, 1800076.	2.8	37
14	Revealing Nanostructures through Plasmon Polarimetry. ACS Nano, 2017, 11, 850-855.	14.6	33
15	Nematic superconducting state in iron pnictide superconductors. Nature Communications, 2017, 8, 1880.	12.8	33
16	Bosonic Anomalies in Boron-Doped Polycrystalline Diamond. Physical Review Applied, 2016, 6, .	3.8	30
17	Visible- to UV/Violet Upconversion Dynamics in Er <sup>3+</sup> -Doped Oxyfluoride Nanoscale Glass Ceramics. Advanced Optical Materials, 2013, 1, 747-752.	7.3	28
18	Self-assembled hexagonal double fishnets as negative index materials. Applied Physics Letters, 2011, 98, 091101.	3.3	27

#	ARTICLE	IF	CITATIONS
19	Direct visualization of vortex pattern transition in $\text{ZrB}_{12}$ with Ginzburg-Landau parameter close to the dual point. <i>Physical Review B</i> , 2014, 90, .	3.2	27
20	Bound vortex dipoles generated at pinning centres by Meissner current. <i>Nature Communications</i> , 2015, 6, 6573.	12.8	27
21	Vortex phase transition and isotropic flux dynamics in $\text{K}_{0.8}\text{Fe}_2\text{Se}_2$ single crystal lightly doped with Mn. <i>Applied Physics Letters</i> , 2013, 103, 052602.	3.3	25
22	Line Position and Quality Factor of Plasmonic Resonances Beyond the Quasi-Static Limit: A Full-Wave Eigenmode Analysis Route. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2013, 19, 4600908-4600908.	2.9	25
23	Appropriate Nonlocal Hydrodynamic Models for the Characterization of Deep Nanometer Scale Plasmonic Scatterers. <i>Advanced Theory and Simulations</i> , 2020, 3, 1900172.	2.8	24
24	Synchronous Temperature and Magnetic Field Dual Sensing by Luminescence in a Dysprosium Single-Molecule Magnet. <i>Advanced Optical Materials</i> , 2021, 9, 2101495.	7.3	24
25	Energy-transfer luminescence of a zinc oxide/ytterbium oxide nanocomposite. <i>RSC Advances</i> , 2012, 2, 8783.	3.6	23
26	Direct observation of the depairing current density in single-crystalline $\text{Ba}_{0.5}\text{K}_{0.5}\text{Fe}_2\text{As}_2$ microbridge with nanoscale thickness. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	23
27	Local destruction of superconductivity by non-magnetic impurities in mesoscopic iron-based superconductors. <i>Nature Communications</i> , 2015, 6, 7614.	12.8	19
28	Nanostripe length dependence of plasmon-induced material deformations. <i>Optics Letters</i> , 2013, 38, 2256.	3.3	18
29	On the Use of Group Theory in Understanding the Optical Response of a Nanoantenna. <i>IEEE Transactions on Antennas and Propagation</i> , 2015, 63, 1589-1602.	5.1	18
30	A facile way to introduce planar defects into colloidal photonic crystals for pronounced passbands. <i>Journal of Materials Chemistry C</i> , 2014, 2, 8829-8836.	5.5	17
31	Statistics of localized phase slips in tunable width planar point contacts. <i>Scientific Reports</i> , 2017, 7, 44569.	3.3	17
32	Near-Field Mapping of Optical Fabry-Perot Modes in All-Dielectric Nanoantennas. <i>Nano Letters</i> , 2017, 17, 7629-7637.	9.1	17
33	Direct Observation of Nanoscale Light Confinement without Metal. <i>Advanced Materials</i> , 2019, 31, e1806341.	21.0	17
34	Interacting plasmonic nanostructures beyond the quasi-static limit: a circuit model. <i>Optics Express</i> , 2013, 21, 31105.	3.4	16
35	Bosonic Confinement and Coherence in Disordered Nanodiamond Arrays. <i>ACS Nano</i> , 2017, 11, 11746-11754.	14.6	16
36	Enantiomorphing Chiral Plasmonic Nanostructures: A Counterintuitive Sign Reversal of the Nonlinear Circular Dichroism. <i>Advanced Optical Materials</i> , 2018, 6, 1800153.	7.3	16

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37	A Potential-Based Formalism for Modeling Local and Hydrodynamic Nonlocal Responses From Plasmonic Waveguides. IEEE Transactions on Antennas and Propagation, 2019, 67, 3948-3960.	5.1	16
38	Direct visualization of vortex ice in a nanostructured superconductor. Physical Review B, 2017, 96, .	3.2	15
39	Controlled Generation of Quantized Vortexâ€“Antivortex Pairs in a Superconducting Condensate. Nano Letters, 2017, 17, 5003-5007.	9.1	15
40	Preparing polymer films doped with magnetic nanoparticles by spin-coating and melt-processing can induce an in-plane magnetic anisotropy. Journal of Applied Physics, 2011, 109, .	2.5	12
41	A Review on the Application of Integral Equationâ€“Based Computational Methods to Scattering Problems in Plasmonics. Advanced Theory and Simulations, 2019, 2, 1900087.	2.8	12
42	Vortex pinning in Nb thin films modulated by nanospheres. Journal of Applied Physics, 2006, 100, 044307.	2.5	9
43	Synthesis of PEGylated Magnetic Nanoparticles With Different Core Sizes. IEEE Transactions on Magnetism, 2013, 49, 219-226.	2.1	9
44	Impurity effects on the normal-state transport properties of $\text{Ba}_{0.5}\text{K}_{0.5}\text{FeAs}$ . Physical Review B, 2014, 90, .	3.9	9
45	Yu-Shiba-Rusinov bands in ferromagnetic superconducting diamond. Science Advances, 2020, 6, eaaz2536.	10.3	9
46	Magnetic dipoles at topological defects in the Meissner state of a nanostructured superconductor. Physical Review B, 2016, 93, .	3.2	8
47	Determination of the lower critical field $H_1$ (T) in FeSe single crystals by magnetization measurements. Physica C: Superconductivity and Its Applications, 2014, 503, 143-145.	1.2	7
48	Spin State Crossover, Vibrational, Computational, and Structural Studies of Fe <sup>II</sup> â€“isopropylâ€“tetrazole Derivatives. European Journal of Inorganic Chemistry, 2018, 2018, 394-413.	2.0	7
49	Quantum states and vortex patterns in nanosuperconductors. Annalen Der Physik, 2013, 525, 951-956.	2.4	6
50	Tunable and switchable magnetic dipole patterns in nanostructured superconductors. Nature Communications, 2018, 9, 2576.	12.8	6
51	Exploring the impact of core expansion on the vortex distribution in superconductingâ€“normal-metal hybrid nanostructures. Physical Review B, 2019, 100, .	3.2	6
52	Anomalous Anisotropy in Superconducting Nanodiamond Films Induced by Crystallite Geometry. Physical Review Applied, 2019, 12, .	3.8	5
53	Superconductor-insulator transition driven by pressure-tuned intergrain coupling in nanodiamond films. Physical Review Materials, 2019, 3, .	2.4	5
54	Ginzburgâ€“Landau Theory: A Powerful Tool to Study Vortex Matter in Nanostructured Superconductors. Journal of Superconductivity and Novel Magnetism, 2007, 19, 409-416.	1.8	4

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55	Dendritic optical antennas: scattering properties and fluorescence enhancement. Scientific Reports, 2017, 7, 6223.	3.3	3
56	On the use of the Method of Moments in plasmonic applications. , 2010, , .		2
57	The Method of Moments at IR and optical frequencies. , 2011, , .		1
58	Joule Heating Induced Nonlinear Behavior in the Phase-Separated System (La <sub>0.73</sub> Bi <sub>0.27</sub> ) <sub>0.67</sub> Ca <sub>0.33</sub> MnO <sub>3</sub> . Journal of Low Temperature Physics, 2011, 163, 176-183.	1.4	1
59	The origin of second harmonic generation hotspots in chiral optical metamaterials. , 2011, , .		1
60	Solution of linearized Ginzburg-Landau problem for mesoscopic superconductors by conformal mapping. Journal of Physics: Conference Series, 2013, 410, 012162.	0.4	1
61	A radio-frequency coil for the microwave characterization of vortex dynamics in thin film superconductors. Review of Scientific Instruments, 2015, 86, 064701.	1.3	1
62	Chiral Nanomaterials: Enantiomorphing Chiral Plasmonic Nanostructures: A Counterintuitive Sign Reversal of the Nonlinear Circular Dichroism (Advanced Optical Materials 14/2018). Advanced Optical Materials, 2018, 6, 1870057.	7.3	1
63	Single-Molecule Fluorescence Enhancement by Plasmonic Core-Shell Nanostructures Incorporating Nonlocal Effects. Advanced Theory and Simulations, 0, , 2100558.	2.8	1
64	Nonlocal response of plasmonic core-shell nanotopologies excited by dipole emitters. Nanoscale Advances, 2022, 4, 2346-2355.	4.6	1
65	Fano resonances in spectroscopy of individual hybridized plasmonic nanocavities. , 2009, , .		0
66	The Integral Equation technique: Applications at THz, IR, and optical frequencies. , 2011, , .		0
67	Multi-level hierarchical meshing for nanotopologies in Volumetric Method of Moments. , 2012, , .		0
68	Plasmonics: Plasmon-Enhanced Sub-Wavelength Laser Ablation: Plasmonic Nanojets (Adv. Mater.) Tj ETQq0 0 0 rgBJ/Overlock 10 Tf 50	21.0	0
69	Plasmonic Nanoantennas: Lateral Magnetic Near-Field Imaging of Plasmonic Nanoantennas With Increasing Complexity (Small 10/2014). Small, 2014, 10, 1958-1958.	10.0	0
70	On a Unified Approach Towards the Modeling of Nonlocal Hydrodynamic Non-classical Response from Plasmonic Nanotopologies. , 2019, , .		0
71	Simultaneously Control the Optical and Paramagnetic Properties of Bifunctional Na(Y <sub>0.8-x</sub> Dy <sub>x</sub> Yb <sub>0.18</sub> Er <sub>0.02</sub> )F <sub>4</sub> Nanoparticles. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-6.	2.9	0
72	Modal Analysis of Deep Nanoscale Plasmonic Structures: Nonlocal Hydrodynamic Approach. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
73	Low-temperature transport properties of doped $\text{Ba}_{0.57}\text{K}_{0.43}\text{FeAs}_2$ superconductors in high magnetic field. Physical Review B, 2021, 103, .	3.2	0
74	Hydrodynamic Approach for Deep-nanometer Scale Topologies: Analysis of Metallic Shell. , 2021, , .		0
75	Nonlocal Response of Plasmonic Nanostructures Excited by Dipole Emitters. , 2021, , .		0
76	Nonlocal Hydrodynamic Models for the Optical Response of Plasmonic Nanostructures. , 2020, , .		0