

Ivan Vitev

List of Publications by Year in descending order

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126
papers

7,210
citations

50276

46
h-index

54911

84
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131
all docs

131
docs citations

131
times ranked

5076
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Reaction operator approach to non-abelian energy loss. Nuclear Physics B, 2001, 594, 371-419. | 2.5 | 619 |
| 2 | Non-Abelian Energy Loss at Finite Opacity. Physical Review Letters, 2000, 85, 5535-5538. | 7.8 | 419 |
| 3 | Heavy-flavour and quarkonium production in the LHC era: from proton to heavy-ion collisions. European Physical Journal C, 2016, 76, 107. | 3.9 | 400 |
| 4 | High-pT Azimuthal Asymmetry in Noncentral A+A at RHIC. Physical Review Letters, 2001, 86, 2537-2540. | 7.8 | 313 |
| 5 | High-pT Tomography of Au+Au and Au+Au at SPS, RHIC, and LHC. Physical Review Letters, 2002, 89, 252301. | 7.8 | 292 |
| 6 | Heavy-ion collisions at the LHC – Last call for predictions. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 054001. | 3.6 | 255 |
| 7 | Jet quenching in thin quark-gluon plasmas I: formalism. Nuclear Physics B, 2000, 571, 197-233. | 2.5 | 220 |
| 8 | Light-cone wave function approach to open heavy flavor dynamics in QCD matter. Physical Review C, 2009, 80, . | 2.9 | 179 |
| 9 | PREDICTIONS FOR p+Pb COLLISIONS AT $\sqrt{s_{NN}} = 5$. International Journal of Modern Physics E, 2013, 22, 1330007. | 1.0 | 165 |
| 10 | Jet tomography of Au+Au reactions including multi-gluon fluctuations. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 538, 282-288. | 4.1 | 160 |
| 11 | QCD evolution of the Sivers asymmetry. Physical Review D, 2014, 89, . | 4.7 | 137 |
| 12 | Extraction of heavy-flavor transport coefficients in QCD matter. Nuclear Physics A, 2018, 979, 21-86. | 1.5 | 137 |
| 13 | Non-Abelian energy loss in cold nuclear matter. Physical Review C, 2007, 75, . | 2.9 | 125 |
| 14 | Collisional dissociation of heavy mesons in dense QCD matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 649, 139-146. | 4.1 | 125 |
| 15 | A theory of jet shapes and cross sections: from hadrons to nuclei. Journal of High Energy Physics, 2008, 2008, 093-093. | 4.7 | 110 |
| 16 | Jet Tomography of High-Energy Nucleus-Nucleus Collisions at Next-to-Leading Order. Physical Review Letters, 2010, 104, 132001. | 7.8 | 109 |
| 17 | reactions at the Large Hadron Collider. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 713, 224-232. | 4.1 | 108 |
| 18 | Initial state parton broadening and energy loss probed in d+Au at RHIC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 562, 36-44. | 4.1 | 107 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Large angle hadron correlations from medium-induced gluon radiation. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2005, 630, 78-84. | 4.1 | 102 |
| 20 | Transverse expansion and high pT azimuthal asymmetry at RHIC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2002, 526, 301-308. | 4.1 | 94 |
| 21 | An effective theory for jet propagation in dense QCD matter: jet broadening and medium-induced bremsstrahlung. Journal of High Energy Physics, 2011, 2011, 1. | 4.7 | 94 |
| 22 | Last call for RHIC predictions. Nuclear Physics A, 1999, 661, 205-260. | 1.5 | 91 |
| 23 | The semi-inclusive jet function in SCET and small radius resummation for inclusive jet production. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 91 |
| 24 | Momentum Imbalance of Isolated Photon-Tagged Jet Production at RHIC and LHC. Physical Review Letters, 2013, 110, 142001. | 7.8 | 89 |
| 25 | High transverse momentum quarkonium production and dissociation in heavy ion collisions. Physical Review C, 2013, 87, . | 2.9 | 88 |
| 26 | Coherent QCD multiple scattering in proton-nucleus collisions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 632, 507-511. | 4.1 | 86 |
| 27 | Jet quenching and the R_{AA}^{jet} anomaly in heavy ion collisions at relativistic energies. Physical Review C, 2002, 65, . | 2.9 | 76 |
| 28 | Medium-induced parton splitting kernels from Soft Collinear Effective Theory with Glauber gluons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 706, 371-378. | 4.1 | 75 |
| 29 | Testing the theory of QGP-induced energy loss at RHIC and the LHC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2006, 639, 38-45. | 4.1 | 69 |
| 30 | Reaction operator approach to multiple elastic scatterings. Physical Review D, 2002, 66, . | 4.7 | 67 |
| 31 | Jet quenching from QCD evolution. Physical Review D, 2016, 93, . | 4.7 | 66 |
| 32 | Towards the understanding of jet shapes and cross sections in heavy ion collisions using soft-collinear effective theory. Journal of High Energy Physics, 2016, 2016, 1. | 4.7 | 65 |
| 33 | Resummed QCD Power Corrections to Nuclear Shadowing. Physical Review Letters, 2004, 93, 262301. | 7.8 | 64 |
| 34 | JET QUENCHING AND RADIATIVE ENERGY LOSS IN DENSE NUCLEAR MATTER. , 2004, , 123-191. | | 63 |
| 35 | Probing the Hardest Branching within Jets in Heavy-Ion Collisions. Physical Review Letters, 2017, 119, 112301. | 7.8 | 63 |
| 36 | Nuclear modification of high transverse momentum particle production in p+A collisions at RHIC and LHC. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 718, 482-487. | 4.1 | 62 |

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|----|--|------|-----------|
| 37 | Physics of Z -tagged jets at energies available at the CERN Large Hadron Collider. <i>Physical Review C</i> , 2011, 83, . | 2.9 | 60 |
| 38 | Jet Quenching Phenomenology from Soft-Collinear Effective Theory with Glauber Gluons. <i>Physical Review Letters</i> , 2015, 114, 092002. | 7.8 | 59 |
| 39 | Inclusive b-jet production in heavy ion collisions at the LHC. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2013, 726, 251-256. | 4.1 | 58 |
| 40 | A possible determination of the quark radiation length in cold nuclear matter. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2011, 704, 590-595. | 4.1 | 52 |
| 41 | Inclusive production of small radius jets in heavy-ion collisions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2017, 769, 242-248. | 4.1 | 52 |
| 42 | Jet substructure using semi-inclusive jet functions in SCET. <i>Journal of High Energy Physics</i> , 2016, 2016, 1. | 4.7 | 51 |
| 43 | Effective field theory approach to open heavy flavor production in heavy-ion collisions. <i>Journal of High Energy Physics</i> , 2017, 2017, 1. | 4.7 | 51 |
| 44 | A systematic study of direct photon production in heavy ion collisions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2008, 669, 337-344. | 4.1 | 49 |
| 45 | Jet tomography. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2004, 30, S791-S800. | 3.6 | 48 |
| 46 | Open charm tomography of cold nuclear matter. <i>Physical Review D</i> , 2006, 74, . | 4.7 | 47 |
| 47 | Multiple scattering effects on heavy meson production in p+A collisions at backward rapidity. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2015, 740, 23-29. | 4.1 | 46 |
| 48 | Nuclear shadowing in neutrino-nucleus deeply inelastic scattering. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2004, 587, 52-61. | 4.1 | 45 |
| 49 | Di-hadron momentum imbalance and correlations in d -Au collisions. <i>Physical Review D</i> , 2012, 85, . | 4.7 | 44 |
| 50 | Transverse momentum diffusion and broadening of the back-to-back di-hadron correlation function. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2003, 570, 161-170. | 4.1 | 43 |
| 51 | Predictions for cold nuclear matter effects in p+Pb collisions at $\sqrt{s} = 2.76$ TeV. <i>Nuclear Physics A</i> , 2018, 972, 18-85. | 1.5 | 43 |
| 52 | Next-to-Leading-Order Forward Hadron Production in the Small- x Regime: The Role of Rapidity Factorization. <i>Physical Review Letters</i> , 2014, 113, 062002. | 7.8 | 42 |
| 53 | Prospects for quarkonium studies at the high-luminosity LHC. <i>Progress in Particle and Nuclear Physics</i> , 2022, 122, 103906. | 14.4 | 41 |
| 54 | Formation and decay of hadronic resonances in the QGP. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2008, 669, 92-97. | 4.1 | 40 |

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|----|--|-----|-----------|
| 73 | Next-to-leading order transverse momentum-weighted Siverts asymmetry in semi-inclusive deep inelastic scattering: The role of the three-gluon correlator. <i>Physical Review D</i> , 2015, 92, . | 4.7 | 23 |
| 74 | Hadron production from quark coalescence and jet fragmentation. <i>Physical Review C</i> , 2005, 71, . | 2.9 | 21 |
| 75 | Transverse momentum imbalance of back-to-back particle production in pA collisions. <i>Physical Review D</i> , 2012, 86, . | 4.7 | 21 |
| 76 | Photon-tagged and B-meson-tagged b-jet production at the LHC. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2015, 750, 287-293. | 4.1 | 21 |
| 77 | Theoretical developments in heavy and light flavor energy loss. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2008, 35, 104011. | 3.6 | 20 |
| 78 | Heavy meson tomography of cold nuclear matter at the electron-ion collider. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2021, 816, 136261. | 4.1 | 18 |
| 79 | Novel heavy flavour suppression mechanisms in the QGP. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2007, 34, S769-S773. | 3.6 | 17 |
| 80 | Inclusive heavy flavor jet production with semi-inclusive jet functions: from proton to heavy-ion collisions. <i>Journal of High Energy Physics</i> , 2019, 2019, 1. | 4.7 | 17 |
| 81 | Photon-tagged heavy meson production in high energy nuclear collisions. <i>Physical Review D</i> , 2011, 84, . | 4.7 | 16 |
| 82 | Transverse-energy-energy correlations in deep inelastic scattering. <i>Journal of High Energy Physics</i> , 2020, 2020, 1. | 4.7 | 15 |
| 83 | Jet quenching in thin plasmas. <i>Nuclear Physics A</i> , 1999, 661, 637-640. | 1.5 | 14 |
| 84 | The theory and phenomenology of jets in nuclear collisions. <i>European Physical Journal C</i> , 2009, 62, 139-144. | 3.9 | 14 |
| 85 | Jet charge modification in finite QCD matter. <i>Physical Review D</i> , 2020, 101, . | 4.7 | 14 |
| 86 | Operator definition and derivation of collisional energy and momentum loss in relativistic plasmas. <i>Physical Review D</i> , 2014, 89, . | 4.7 | 13 |
| 87 | Energy-energy correlators in deep inelastic scattering. <i>Physical Review D</i> , 2021, 103, . | 4.7 | 13 |
| 88 | Multiple scattering effects on inclusive particle production in the large- x regime. <i>Physical Review D</i> , 2013, 88, . | 4.7 | 12 |
| 89 | Light and heavy flavor dijet production and dijet mass modification in heavy ion collisions. <i>Physical Review D</i> , 2019, 99, . | 4.7 | 12 |
| 90 | Nuclear Matter Effects on Jet Production at Electron-Ion Colliders. <i>Physical Review Letters</i> , 2021, 126, 252001. | 7.8 | 12 |

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|-----|---|-----|-----------|
| 91 | An effective theory of quarkonia in QCD matter. Journal of High Energy Physics, 2019, 2019, 1. | 4.7 | 12 |
| 92 | A New Heavy Flavor Program for the Future Electron-Ion Collider. EPJ Web of Conferences, 2020, 235, 04002. | 0.3 | 10 |
| 93 | Spin asymmetries for vector boson production in polarized p+p collisions. Physical Review D, 2016, 93, . | 4.7 | 8 |
| 94 | Initial-state splitting kernels in cold nuclear matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 760, 706-712. | 4.1 | 7 |
| 95 | Heavy flavor jet production and substructure in electron-nucleus collisions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 827, 137007. | 4.1 | 7 |
| 96 | Jet quenching in relativistic heavy ion collisions. Journal of Physics: Conference Series, 2006, 50, 119-126. | 0.4 | 6 |
| 97 | Jets in Evolving Matter within the Opacity Expansion Approach. SciPost Physics Proceedings, 2022, , . | 0.4 | 6 |
| 98 | Multiparton Tomography of Hot and Cold Nuclear Matter. AIP Conference Proceedings, 2004, , . | 0.4 | 5 |
| 99 | Jet Energy Loss in Hot and Dense Matter. Acta Physica Hungarica A Heavy Ion Physics, 2003, 17, 237-247. | 0.4 | 4 |
| 100 | PROBING THE PHASES OF QCD IN ULTRA-RELATIVISTIC NUCLEAR COLLISIONS. International Journal of Modern Physics A, 2005, 20, 3777-3782. | 1.5 | 4 |
| 101 | Initial-state bremsstrahlung versus final-state hydrodynamic sources of azimuthal harmonics in p and A collisions at RHIC and LHC. Nuclear Physics A, 2014, 931, 943-948. | 1.5 | 4 |
| 102 | NLO analysis of inclusive jet, tagged jet and di-jet production in Pb+Pb collisions at the LHC. Journal of Physics G: Nuclear and Particle Physics, 2011, 38, 124087. | 3.6 | 3 |
| 103 | DIRECT PHOTON PRODUCTION IN $d+A$ AND $A+A$ COLLISIONS AT RHIC. Modern Physics Letters A, 2009, 24, 2649-2658. | 1.2 | 2 |
| 104 | A Brief Overview of Fixed-Order Perturbative QCD Calculations of Jet Production in Heavy-Ion Collisions. Progress of Theoretical Physics Supplement, 2011, 187, 68-77. | 0.1 | 2 |
| 105 | TRANSVERSE MOMENTUM-WEIGHTED SIVERS ASYMMETRY IN SEMI-INCLUSIVE DEEP INELASTIC SCATTERING AT NEXT-TO-LEADING ORDER. International Journal of Modern Physics Conference Series, 2014, 25, 1460019. | 0.7 | 2 |
| 106 | Sivers Asymmetry with QCD Evolution. International Journal of Modern Physics Conference Series, 2015, 37, 1560025. | 0.7 | 2 |
| 107 | Quarkonium tomography of heavy ion collisions at the LHC. Nuclear Physics A, 2019, 982, 731-734. | 1.5 | 2 |
| 108 | Nuclear Effects on Open Charm Production in $p+A$ Reactions. Acta Physica Hungarica A Heavy Ion Physics, 2006, 27, 275-279. | 0.4 | 1 |

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|-----|--|-----|-----------|
| 109 | Testing the Mechanism of QGP-Induced Energy Loss. Acta Physica Hungarica A Heavy Ion Physics, 2006, 27, 281-286. | 0.4 | 1 |
| 110 | Recent pQCD calculations of heavy quark production. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, S317-S324. | 3.6 | 1 |
| 111 | pQCD Approach to Parton Propagation in Matter. Nuclear Physics A, 2007, 783, 31-38. | 1.5 | 1 |
| 112 | Electroweak Boson-Tagged Jet Event Asymmetries at the Large Hadron Collider. Nuclear Physics A, 2013, 904-905, 701c-704c. | 1.5 | 1 |
| 113 | Hard Probes in Heavy Ion Collisions: Current Status and Prospects for Application of QCD Evolution Techniques. International Journal of Modern Physics Conference Series, 2015, 37, 1560059. | 0.7 | 1 |
| 114 | Quenching of inclusive and tagged b-jets at the LHC. Nuclear and Particle Physics Proceedings, 2016, 276-278, 281-284. | 0.5 | 1 |
| 115 | An Effective Theory of Quarkonia in QCD Matter. Nuclear Physics A, 2021, 1005, 121848. | 1.5 | 1 |
| 116 | Large angle hadron correlations from medium-induced gluon radiation. Journal of Physics: Conference Series, 2005, 27, 11-21. | 0.4 | 0 |
| 117 | Results on high transverse momentum quarkonium production and dissociation in heavy ion collisions. Journal of Physics: Conference Series, 2012, 389, 012029. | 0.4 | 0 |
| 118 | Formation time of hadronic resonances. EPJ Web of Conferences, 2012, 36, 00018. | 0.3 | 0 |
| 119 | Probing nuclear matter with jets. Nuclear Physics A, 2013, 910-911, 256-259. | 1.5 | 0 |
| 120 | Soft-collinear effective theory for hadronic and nuclear collisions: The evolution of jet quenching from RHIC to the highest LHC energies. Nuclear Physics A, 2016, 956, 677-680. | 1.5 | 0 |
| 121 | SCET for jet physics in the vacuum and the medium. Nuclear and Particle Physics Proceedings, 2017, 289-290, 59-64. | 0.5 | 0 |
| 122 | Jet and heavy flavor production in heavy-ion collisions. Nuclear and Particle Physics Proceedings, 2017, 289-290, 121-124. | 0.5 | 0 |
| 123 | Inverting the mass hierarchy of jet quenching effects with prompt b -jet substructure. Journal of Physics: Conference Series, 2018, 1070, 012020. | 0.4 | 0 |
| 124 | Vector boson tagged jets and jet substructure. EPJ Web of Conferences, 2018, 172, 05006. | 0.3 | 0 |
| 125 | PROBING HOT, DENSE MATTER AT RHIC. , 2002, , . | | 0 |
| 126 | Nuclear matter effects on jet production at electron-ion colliders. SciPost Physics Proceedings, 2022, , . | 0.4 | 0 |