

# Mladen HorvatiÄ

## List of Publications by Year in descending order

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163  
papers

5,729  
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66343

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169  
all docs

169  
docs citations

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times ranked

3704  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic-field-induced charge-stripe order in the high-temperature superconductor YBa <sub>2</sub> Cu <sub>3</sub> O <sub>y</sub> . Nature, 2011, 477, 191-194.	27.8	660
2	Magnetic Superstructure in the Two-Dimensional Quantum Antiferromagnet SrCu <sub>2</sub> (BO <sub>3</sub> ) <sub>2</sub> . Science, 2002, 298, 395-399.	12.6	288
3	Incipient charge order observed by NMR in the normal state of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>y</sub> . Nature Communications, 2015, 6, 6438.	12.8	211
4	Emergence of charge order from the vortex state of a high-temperature superconductor. Nature Communications, 2013, 4, 2113.	12.8	210
5	<sup>63</sup> Cu NMR Evidence for Enhanced Antiferromagnetic Correlations around Zn Impurities in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6.7</sub> . Physical Review Letters, 2000, 84, 3422-3425.	7.8	199
6	Controlling Luttinger Liquid Physics in Spin Ladders under a Magnetic Field. Physical Review Letters, 2008, 101, 137207.	7.8	171
7	Spin Gap in HgBa <sub>2</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>8+δ</sub> Single Crystals from <sup>63</sup> Cu NMR. Physical Review Letters, 1996, 76, 4238-4241.	7.8	143
8	Evidence of Andreev bound states as a hallmark of the FFLO phase in $\hat{\Gamma}^{\pm}$ -(BEDT-TTF) <sub>2</sub> Cu(NCS) <sub>2</sub> . Nature Physics, 2014, 10, 928-932.	16.7	140
9	Statics and dynamics of weakly coupled antiferromagnetic spin- $\frac{1}{2}$ in a magnetic field. Physical Review B, 2011, 83, .	3.2	107
10	Zero temperature phase transitions in spin-ladders: Phase diagram and dynamical studies of. European Physical Journal B, 1998, 6, 167-181.	1.5	102
11	Charge Segregation, Cluster Spin Glass, and Superconductivity in La <sub>1.94</sub> Sr <sub>0.06</sub> CuO <sub>4</sub> . Physical Review Letters, 1999, 83, 604-607.	7.8	100
12	Nuclear Magnetic Resonance Study of the S=1/2 Heisenberg Ladder Cu <sub>2</sub> (C <sub>5</sub> H <sub>12</sub> N <sub>2</sub> ) <sub>2</sub> Cl <sub>4</sub> : Quantum Phase Transition and Critical Dynamics. Physical Review Letters, 1998, 80, 2713-2716.	7.8	99
13	Homogeneous vs. inhomogeneous coexistence of magnetic order and superconductivity probed by NMR in Co- and K-doped iron pnictides. Europhysics Letters, 2009, 87, 37001.	2.0	95
14	NMR evidence for localized spins on Cu(2) sites from Cu NMR in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> and YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6.75</sub> single crystals. Physical Review B, 1989, 39, 7332-7335.	3.2	89
15	NMR Determination of 2D Electron Spin Polarization at $\hat{\Gamma}^{\pm}$ . Physical Review Letters, 2000, 84, 354-357.	7.8	84
16	Glassy spin freezing and NMR wipeout effect in the high-T <sub>c</sub> superconductor La <sub>1.90</sub> Sr <sub>0.10</sub> CuO <sub>4</sub> : Critical discussion of the role of stripes. Physical Review B, 2001, 63, .	3.2	78
17	Field Evolution of Coexisting Superconducting and Magnetic Orders in CeCoIn <sub>5</sub> . Physical Review Letters, 2010, 104, 087001.	7.8	78
18	Proton NMR for Measuring Quantum Level Crossing in the Magnetic Molecular Ring Fe <sub>10</sub> . Physical Review Letters, 1999, 83, 227-230.	7.8	76

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19	Nuclear Magnetic Resonance Signature of the Spin-Nematic Phase in $\text{LiCuVO}_4$ at High Magnetic Fields. <i>Physical Review Letters</i> , 2017, 118, 247201.	7.8	67
20	$^{17}\text{O}$ NMR study of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ ( $T_c=92$ K). <i>Physica C: Superconductivity and Its Applications</i> , 1989, 159, 689-696.	1.2	66
21	One-Third Magnetization Plateau with a Preceding Novel Phase in Volborthite. <i>Physical Review Letters</i> , 2015, 114, 227202.	7.8	65
22	$^{89}\text{Y}$ NMR Imaging of the Staggered Magnetization in the Doped Haldane Chain $\text{Y}_2\text{BaNi}_4\text{Mg}_x\text{O}_5$ . <i>Physical Review Letters</i> , 1999, 83, 412-415.	7.8	64
23	Observation of Spin Susceptibility Enhancement in the Possible Fulde-Ferrell-Larkin-Ovchinnikov State of $\text{CeCoIn}_5$ . <i>Physical Review Letters</i> , 2006, 97, 117002.	7.8	63
24	Identification of Nuclear Relaxation Processes in a Gapped Quantum Magnet: $^{1}\text{H}$ NMR in the $S=1/2$ Heisenberg Ladder $\text{Cu}_2(\text{C}_5\text{H}_{12}\text{N}_2)_2\text{Cl}_4$ . <i>Physical Review Letters</i> , 1997, 79, 925-928.	7.8	62
25	NMR investigation of single-crystal $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ from the underdoped to the overdoped regime. <i>Physical Review B</i> , 1993, 47, 3461-3464.	3.2	61
26	Similar glassy features in the response of pure and disordered $\text{LaMnO}_3$ .	3.2	60
27	Magnetic Properties of the Diamond Chain Compound $\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$ . <i>Progress of Theoretical Physics Supplement</i> , 2005, 159, 1-10.	7.8	57
28	Observation of Magnetic Level Repulsion in $\text{Fe}_6\text{Li}$ Molecular Antiferromagnetic Rings. <i>Physical Review Letters</i> , 2002, 88, 167201.	7.8	56
29	Recent Advances in Superconductivity Driven by Quantum Tricritical Fluctuations in $\text{URhGe}$ : Evidence from $^{59}\text{Co}$ NMR.	7.8	55
30	Magnetic Properties of the Diamond Chain Compound $\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$ . <i>Progress of Theoretical Physics Supplement</i> , 2005, 159, 1-10.	0.1	54
31	Confinement in Bechgaard Salts: Anomalous Magnetoresistance and Nuclear Relaxation. <i>Physical Review Letters</i> , 1995, 74, 5272-5275.	7.8	52
32	$^{67}\text{Ga}$ NMR Study of the Local Susceptibility in Kagomé-Based $\text{SrCr}_8\text{Ga}_4\text{O}_{19}$ : Pseudogap and Paramagnetic Defects. <i>Physical Review Letters</i> , 2000, 85, 3496-3499.	7.8	51
33	Attractive Tomonaga-Luttinger Liquid in a Quantum Spin Ladder. <i>Physical Review Letters</i> , 2013, 111, 106404.	7.8	50
34	NMR Evidence for a Magnetic Soliton Lattice in the High-Field Phase of $\text{CuGeO}_3$ . <i>Physical Review Letters</i> , 1996, 77, 1861-1864.	7.8	49
35	NMR Imaging of the Soliton Lattice Profile in the Spin-Peierls Compound $\text{CuGeO}_3$ . <i>Physical Review Letters</i> , 1999, 83, 420-423.	7.8	49
36	New Phase Transition between Partially and Fully Polarized Quantum Hall States with Charge and Spin Gaps at $\nu=2/3$ . <i>Physical Review Letters</i> , 2001, 87, 136801.	7.8	49

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37	Nonmagnetic Insulator State in Na <sub>1-x</sub> CoO <sub>2</sub> and Phase Separation of Na Vacancies. Physical Review Letters, 2005, 95, 186405.	7.8	47
38	Electronic Texture of the Thermoelectric Oxide Na <sub>0.75</sub> CoO <sub>2</sub> . Physical Review Letters, 2008, 100, 096405.	7.8	47
39	Emergence of Orbital Nematicity in the Tetragonal Phase of BaFe <sub>2</sub> (As <sub>1-x</sub> ) <sub>2</sub> P <sub>2</sub> . Journal of the Physical Society of Japan, 2015, 84, 043705.	1.6	46
40	Field dependence of the quantum ground state in the Shastry-Sutherland system SrCu <sub>2</sub> (BO <sub>3</sub> ) <sub>2</sub> . Europhysics Letters, 2008, 81, 67004.	2.0	44
41	NMR Evidence for a Generalized Spin-Peierls Transition in the High-Magnetic-Field Phase of the Spin Ladder Cu <sub>2</sub> (C <sub>5</sub> H <sub>12</sub> N <sub>2</sub> ) <sub>2</sub> Cl <sub>4</sub> . Physical Review Letters, 2000, 85, 4795-4798.	7.8	42
42	Quantum-Critical Spin Dynamics in Quasi-One-Dimensional Antiferromagnets. Physical Review Letters, 2012, 109, 177206.	7.8	42
43	Nuclear-spin-lattice relaxation rate of planar oxygen in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6.52</sub> and YBa <sub>1.92</sub> Sr <sub>0.08</sub> Cu <sub>3</sub> O <sub>7</sub> single crystals. Physical Review B, 1993, 48, 13848-13864.	3.2	35
44	NMR Investigation of How Free Composite Fermions Are at $\nu=12$ . Physical Review Letters, 2002, 89, 246804.	7.8	32
45	NMR Evidence for the Persistence of a Spin Superlattice Beyond the Magnetization Plateau in SrCu <sub>2</sub>		

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55	63,65Cu NMR investigation ofCuGeO3single crystals:mThe uniform and the dimerized spin-Peierls phase. Physical Review B, 1997, 55, 2964-2974.	3.2	28
56	17O NMR in YBa2Cu3O6.65. Discrimination between t-J and two-band models. Physica C: Superconductivity and Its Applications, 1990, 166, 301-309.	1.2	27
57	Field-Induced Quantum Soliton Lattice in a Frustrated Two-Leg Spin- $1/2$ Ladder. Physical Review Letters, 2017, 118, 077201.	7.8	27
58	Quantum magnetic field dependence of the coupling between spin chains in $\text{BaCo}_2\text{V}_2\text{O}_8$ . Physical Review B, 2015, 92, .	3.2	27
59	dc ionic conductivity measurements on the mixed conductor $\text{Cu}_2\text{xSe}$ . Solid State Ionics, 1984, 13, 117-125.	2.7	26
60	Field Dependence of the Ground State in the Exotic Superconductor $\text{CeCoIn}_5$ : A Nuclear Magnetic Resonance Investigation. Physical Review Letters, 2008, 101, 047004.	7.8	26
61	Cross-over temperatures and spin-gap in High Tc cuprate superconductors an NMR approach. Physica C: Superconductivity and Its Applications, 1997, 282-287, 227-230.	1.2	25
62	91Zr Nuclear Magnetic Resonance Spectroscopy of Solid Zirconium Halides at High Magnetic Field. Inorganic Chemistry, 2009, 48, 8709-8717.	4.0	24
63	Hyperfine coupling and spin polarization in the bulk of the topological insulator $\text{Bi}_2\text{Te}_3$ . Physical Review B, 2015, 91, .		
64	Dichotomy between Attractive and Repulsive Tomonaga-Luttinger Liquids in Spin Ladders. Physical Review Letters, 2016, 117, 106402.	7.8	24
65	Spin dynamics of the ferric wheel $\text{Fe}_6(\text{triethanolamine})_6$ studied by electron and nuclear spin resonance. Physical Review B, 2005, 71, .	3.2	23
66	Spin dynamics of the spin-Peierls compoundCuGeO3under a magnetic field. Physical Review B, 1997, 55, R11941-R11944.	3.2	22
67	69,71GaNMR in the kagomé lattice compound $\text{SrCr}_9\text{xGa}_3\text{xO}_{19}$ . Physical Review B, 1998, 57, 10745-10749.	3.2	22
68	Dynamical susceptibility and magnetic-field effect at the quantum critical point in $\text{CeCu}_6\text{xAux}$ from Cu NQR-NMR relaxation. Physical Review B, 2003, 68, .	3.2	22
69	Magnetic field-induced charge ordering in $\text{YBa}_2\text{Cu}_3\text{O}_{6-x}$ . Physical Review B, 2017, 95, .	3.2	22
70	Spin dynamics in the high-field phases of volborthite. Physical Review B, 2017, 96, .	3.2	21
71	(TM)2X organic superconductors: interplay between 1-D charge localization and higher dimensionality cross-over. Synthetic Metals, 1995, 70, 719-725.	3.9	20
72	63Cuand89YNMRstudy of an optimally dopedYBa2Cu3O6.94single crystal. Physical Review B, 1997, 56, 11294-11298.	3.2	20



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91	NMR study of $^{17}\text{O}$ in high $T_c$ superconducting oxides. Physica C: Superconductivity and Its Applications, 1989, 162-164, 195-196.	1.2	14
92	High-Field NMR Insights into Quantum Spin Systems. Progress of Theoretical Physics Supplement, 2005, 159, 106-113.	0.1	14
93	Spin polarization of two-dimensional electrons in GaAs quantum wells around Landau level filling $\nu=1$ from NMR measurements of gallium nuclei. Physical Review B, 2001, 64, .	3.2	13
94	NMR study of spin fluctuations in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ . Physica C: Superconductivity and Its Applications, 1991, 185-189, 1141-1142.	1.2	12
95	NMR investigation of $\text{HgBa}_2\text{CaCu}_2\text{O}_{6+\delta}$ . Physica C: Superconductivity and Its Applications, 1994, 235-240, 1669-1670.	1.2	12
96	Nuclear Magnetic Resonance Reveals Disordered Level-Crossing Physics in the Bose-Glass Regime of the Br-Doped $\text{NiMo}_2\text{S}_8$		

#	ARTICLE	IF	CITATIONS
109	Glassy transition in the vortex lattice of Ba(Fe 0.93 Rh 0.07 ) 2 As 2 superconductor probed by NMR and ac-susceptibility. Europhysics Letters, 2013, 102, 17005. Competing Bose-glass physics with disorder-induced Bose-Einstein condensation in the doped	2.0	8
110	$\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{S} \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle = \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle$ antiferromagnet $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle$		



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127	Comment on "Localized behavior near the Zn impurity in YBa <sub>2</sub> Cu <sub>4</sub> O <sub>8</sub> as measured by nuclear quadrupole resonance". Physical Review B, 2005, 71, .	3.2	5
128	High field properties of the frustrated 2D dimer spin system SrCu <sub>2</sub> (BO <sub>3</sub> ) <sub>2</sub> . Journal of Physics: Conference Series, 2006, 51, 23-30.	0.4	5
129	High-field phase diagram of the heavy-fermion metal $\text{CeIn}_3$ : Pulsed-field NMR study on single crystals up to 56 T. Physical Review B, 2019, 99, .		
130	Direct determination of the Tomonaga-Luttinger parameter K in quasi-one-dimensional spin systems. Physical Review B, 2020, 101, .	3.2	5
131	Versatile, low-cost, real-time data acquisition and processing system. Review of Scientific Instruments, 1987, 58, 1133-1133.	1.3	4
132	<sup>63</sup> Cu NMR in the normal state of HgBa <sub>2</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>8+<math>\delta</math></sub> . Journal of Low Temperature Physics, 1996, 105, 371-376.	1.4	4
133	Field-dependent paramagnetic relaxation enhancement in solutions of Ni(II): What happens above the NMR proton frequency of 1 GHz?. Journal of Magnetic Resonance, 2020, 314, 106737.	2.1	4
134	NMR Studies of Low-Dimensional Quantum Antiferromagnets. Lecture Notes in Physics, 2002, , 191-210.	0.7	4
135	NMR evidence against a spin-nematic nature of the presaturation phase in the frustrated magnet $\text{SrZnVO}_4$ . Physical Review B, 2022, 105, .	3.2	4
136	NMR and NQR study of La <sub>1.85</sub> Sr <sub>0.15</sub> CuO <sub>4</sub> and YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+x</sub> (x=0, 0.25). Physica C: Superconductivity and Its Applications, 1988, 153-155, 741-742.	1.2	3
137	NMR study of <sup>63,65</sup> Cu in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> to 6.65 single crystals. Physica C: Superconductivity and Its Applications, 1989, 162-164, 265-266.	1.2	3
138	Investigation of localization in using hyperfine interaction. Europhysics Letters, 2000, 49, 75-80.	2.0	3
139	HIGH FIELD NMR IN STRONGLY CORRELATED LOW-DIMENSIONAL FERMIONIC SYSTEMS. International Journal of Modern Physics B, 2002, 16, 3265-3270.	2.0	3
140	Phase diagram of in the vicinity of as determined by NMR. Physica B: Condensed Matter, 2008, 403, 986-989.	2.7	3
141	Thermal effects versus spin nematicity in a frustrated spin-1/2 chain. Physical Review B, 2020, 102, .	3.2	3
142	Concentration and temperature dependence of the thermal expansion coefficient in the superionic phase of Cu <sub>2-x</sub> Se. Solid State Communications, 1987, 64, 1317-1319.	1.9	2
143	Boundary effects in finite Heisenberg antiferromagnetic S = 1 chains: <sup>89</sup> Y NMR in Y <sub>2</sub> BaNi <sub>1-x</sub> Mg <sub>x</sub> O <sub>5</sub> . Applied Magnetic Resonance, 2000, 19, 381-389.	1.2	2
144	Density-functional calculation of the quadrupole splitting in the <sup>23</sup> Na NMR spectrum of the ferric wheel Na@Fe <sub>6</sub> (tea) <sub>6</sub> + for various broken-symmetry states of the Heisenberg spin model. European Physical Journal B, 2007, 55, 229-235.	1.5	2

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145	<sup>105</sup> Pd NMR and NQR study of the cubic heavy fermion system Ce <sub>3</sub> Pd <sub>20</sub> Si <sub>6</sub> . Journal of Physics Condensed Matter, 2020, 32, 245601.	1.8	2
146	NMR study of the CuGeO <sub>3</sub> spin-Peierls system. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 669-670.	2.3	1
147	The Grenoble Giga-NMR project. IEEE Transactions on Applied Superconductivity, 2000, 10, 732-735.	1.7	1
148	Cu NMR spectra and relaxation in rutheno-cuprate RuSr <sub>2</sub> GdCu <sub>2</sub> O <sub>8</sub> . Journal of Magnetism and Magnetic Materials, 2004, 272-276, E147-E148.	2.3	1
149	Ī-d Interaction in the Field Induced Superconductor Ī-(BETS)2FeCl <sub>4</sub> : Studied by <sup>77</sup> Se NMR. Journal of Low Temperature Physics, 2007, 142, 185-190.	1.4	1
150	<sup>170</sup> Y NMR Investigation of the Electronic Structure of High-Tc Superconducting Oxides. Springer Series in Solid-state Sciences, 1990, , 209-213.	0.3	1
151	Field-angular Dependence of Pairing Interaction in URhGe: Comparison with UCoGe. , 2020, , .		1
152	Mn N.M.R. AND MAGNETIC STRUCTURES IN (Y <sub>1-x</sub> Tb <sub>x</sub> ) Mn <sub>2</sub> COMPOUNDS. Journal De Physique Colloque, 1988, 49, C8-261-C8-262.	0.2	1
153	<sup>170</sup> Y and <sup>63</sup> Cu NMR study of anisotropic magnetic fluctuations in a single crystal of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+x</sub> : Comparison with neutron diffraction. Journal of Magnetism and Magnetic Materials, 1992, 104-107, 589-590.	2.3	0
154	FehÄ©ret al.Reply:. Physical Review Letters, 2001, 87, .	7.8	0
155	Spin superstructure in the -magnetization plateau phase of the 2D orthogonal dimer spin system SrCu <sub>2</sub> (BO <sub>3</sub> ) <sub>2</sub> . Journal of Magnetism and Magnetic Materials, 2004, 272-276, 25-26.	2.3	0
156	Reply to the Comment by S. E. Sebastian and N. Harrison. Europhysics Letters, 2009, 85, 67008.	2.0	0
157	Quantum tricritical fluctuations driving mass enhancement and reentrant superconductivity in URhGe. Journal of Physics: Conference Series, 2016, 683, 012010.	0.4	0
158	Field-induced reentrant superconductivity driven by quantum tricritical fluctuations in URhGe. Physica B: Condensed Matter, 2018, 536, 122-124.	2.7	0
159	<sup>170</sup> Y, <sup>63</sup> Cu and <sup>89</sup> Y NMR Investigation of Spin Fluctuations in High TC Superconducting YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+x</sub> . , 1990, , 297-298.		0
160	<sup>170</sup> Y and <sup>63</sup> Cu NMR Investigation of Spin Fluctuations in High Tc Superconducting Oxides. NATO ASI Series Series B: Physics, 1991, , 73-85.	0.2	0
161	NMR Investigation of Low-Energy Excitations in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>6+x</sub> Single Crystals. Springer Series in Solid-state Sciences, 1993, , 168-174.	0.3	0
162	Dynamics and field-induced order in the layered spin S=1/2 dimer system (C <sub>5</sub> H <sub>6</sub> N <sub>2</sub> F) <sub>2</sub> CuCl <sub>4</sub> . Physical Review Materials, 2019, 3, .	2.4	0

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163	Competing magnetic phases in the frustrated spin-1/2 chain compound $\hat{H}^2$ probed by NMR. Physical Review B, 2022, 105, .		