

# Ivan Nemeč

## List of Publications by Year in descending order

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115  
papers

1,603  
citations

279798

23  
h-index

414414

32  
g-index

118  
all docs

118  
docs citations

118  
times ranked

1647  
citing authors



#	ARTICLE	IF	CITATIONS
19	Novel organic NLO material bis(N-phenylbiguanidium(1+)) oxalate – A combined X-ray diffraction, DSC and vibrational spectroscopic study of its unique polymorphism. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2017, 170, 256-266.	3.9	6
20	The pink pigment prodigiosin: Vibrational spectroscopy and DFT calculations. <i>Dyes and Pigments</i> , 2016, 134, 234-243.	3.7	9
21	Crystal structures and vibrational spectra of biuret co-crystals with cyanuric and glutaric acids, discussion of hydrogen bonding involving carbonyl groups. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2016, 231, 291-300.	0.8	2
22	The efficiency of micro-Raman spectroscopy in the analysis of complicated mixtures in modern paints: Munch's and Kupka's paintings under study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2016, 156, 36-46.	3.9	19
23	The study of crystal structures and vibrational spectra of inorganic salts of 2,4-diaminopyrimidine. <i>Journal of Molecular Structure</i> , 2016, 1103, 82-93.	3.6	9
24	Comparison of hydrates of 4,6-diaminopyrimidine with selected dicarboxylic acids (oxalic, malonic, Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 s346-s346.	0.1	0
25	Naturally irradiated fluorite as a historic violet pigment: X-ray diffraction and Raman spectroscopic study. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2015, 71, s529-s530.	0.1	1
26	Infrared and Visible Photodissociation Spectra of Rhodamine Ions at 3 K in the Gas Phase. <i>Journal of Physical Chemistry A</i> , 2015, 119, 12648-12655.	2.5	24
27	Temperature-dependent vibrational spectroscopic and X-ray diffraction investigation of nanosized nickel chromite. <i>Journal of Molecular Structure</i> , 2015, 1090, 70-75.	3.6	8
28	(2-Azoniasethyl)guanidinium dichloride – A promising phase-matchable NLO material employing a simple hydrogen bond acceptor in its structure. <i>Optical Materials</i> , 2015, 42, 39-46.	3.6	9
29	Naturally irradiated fluorite as a historic violet pigment: Raman spectroscopic and X-ray diffraction study. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 236-243.	2.5	17
30	On preparation of nanocrystalline chromites by co-precipitation and autocombustion methods. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2015, 195, 66-73.	3.5	14
31	Raman spectroscopic study of the <i>Chromobacterium violaceum</i> pigment violacein using multiwavelength excitation and DFT calculations. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 151, 459-467.	3.9	17
32	Single crystals of guanidinium zinc sulfate, $[C(NH_2)_3]_2Zn(SO_4)_2$ – growth, structure, vibrational spectroscopy and stimulated Raman scattering. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2015, 230, 639-649.	0.8	5
33	Twisted intramolecular charge transfer and its contribution to the NLO activity of Diglycine Picrate: A vibrational spectroscopic study. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 135, 720-731.	3.9	2
34	Crocoite $PbCrO_4$ and mimetite $Pb_5(AsO_4)_3Cl$ : rare minerals in highly degraded mediaeval murals in Northern Bohemia. <i>Journal of Raman Spectroscopy</i> , 2014, 45, 848-858.	2.5	26
35	Potential and limits of Raman spectroscopy for carotenoid detection in microorganisms: implications for astrobiology. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20140199.	3.4	61
36	Comparison of the hydrogen-bond patterns in 2-amino-1,3,4-thiadiazolium hydrogen oxalate, 2-amino-1,3,4-thiadiazole-succinic acid (1/2), 2-amino-1,3,4-thiadiazole-glutaric acid (1/1) and 2-amino-1,3,4-thiadiazole-adipic acid (1/1). <i>Acta Crystallographica Section C, Structural Chemistry</i> , 2014, 70, 927-933.	0.5	7

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37	Vibrational spectral investigation and natural bond orbital analysis of pharmaceutical compound 7-Amino-2,4-dimethylquinolinium formate – DFT approach. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 115, 595-602.	3.9	62
38	Growth, electronic absorption and vibrational spectral analysis of semiorganic nonlinear optical material potassium acid phthalate: A scaled quantum mechanical force field study. <i>Journal of Molecular Structure</i> , 2013, 1040, 155-163.	3.6	7
39	Organic salts of guanazole – Seeking for new materials for second harmonic generation. <i>Journal of Molecular Structure</i> , 2013, 1044, 239-247.	3.6	9
40	Microanalysis of clay-based pigments in painted artworks by the means of Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2013, 44, 1570-1577.	2.5	50
41	Lidocaine barbiturate: a promising material for second harmonic generation. <i>CrystEngComm</i> , 2013, 15, 3275.	2.6	20
42	Structural conformations and density functional study on the intramolecular charge transfer based on vibrational spectra of 2,4-dihydroxy-N <sup>2</sup> -(4-methoxybenzylidene)benzohydrazide. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 110, 157-168.	3.9	8
43	Ultrafast optical nonlinearity, electronic absorption, vibrational spectra and solvent effect studies of ninhydrin. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 109, 331-343.	3.9	20
44	1,1-Dimethylbiguanidium(2+) dinitrate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2012, 68, o18-o19.	0.2	7
45	The use of infrared and Raman microspectroscopy for identification of selected red organic dyes in model colour layers of works of art. <i>Vibrational Spectroscopy</i> , 2012, 63, 380-389.	2.2	25
46	A new series of 3,5-diamino-1,2,4-triazolium(1+) inorganic salts and their potential in crystal engineering of novel NLO materials. <i>CrystEngComm</i> , 2012, 14, 4625.	2.6	41
47	Novel Salts of 2,4-Diaminoquinazoline: Searching for Materials for Second Harmonic Generation Based on a Promising Polarizable Cation. <i>Journal of Chemical Crystallography</i> , 2012, 42, 809-815.	1.1	0
48	Semi-organic salts of aniline with inorganic acids: prospective materials for the second harmonic generation. <i>CrystEngComm</i> , 2011, 13, 4131.	2.6	32
49	ACr <sub>2</sub> O <sub>4</sub> /SiO <sub>2</sub> (A = Zn, Cu, Cd) nanocomposites, their preparation and physical properties. <i>IOP Conference Series: Materials Science and Engineering</i> , 2011, 18, 032024.	0.6	1
50	Dussertite BaFe <sup>3+</sup> <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub> (OH) <sub>5</sub> – a Raman spectroscopic study of a hydroxyarsenate mineral. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 56-61.	2.5	30
51	Tris(2-amino-1,3-thiazolium) hydrogen sulfate sulfate monohydrate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2011, 67, o3216-o3217.	0.2	7
52	Bis(2-phenylbiguanidium) adipate tetrahydrate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2011, 67, o118-o119.	0.2	5
53	4-Amino-1H-1,2,4-triazol-1-ium nitrate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2011, 67, o18-o19.	0.2	9
54	2-Amino-1,3-thiazolium dihydrogen phosphate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2011, 67, o3410-o3411.	0.2	3

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55	Organic salts of biguanide – An attempt to crystal engineering of novel materials for second harmonic generation. <i>Journal of Molecular Structure</i> , 2010, 966, 23-32.	3.6	26
56	S-( $\alpha$ )-1-phenyl ethyl ammonium(1+) sulphate and S-( $\alpha$ )-1-phenyl ethyl ammonium(1+) hydrogen phosphate 2.5 hydrate, preparation and characterization of crystallographic, optical and dielectric properties. <i>Journal of Molecular Structure</i> , 2010, 980, 31-38.	3.6	15
57	Guanylurea(1+) hydrogen phosphite: a novel promising phase-matchable material for second harmonic generation. <i>CrystEngComm</i> , 2010, 12, 2054.	2.6	24
58	Salts of guanylurea - novel materials promising for optical applications. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2010, 66, s258-s258.	0.3	3
59	2-Phenylbiguanidinium hydrogen succinate methanol monosolvate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2010, 66, o3187-o3188.	0.2	5
60	Raman and infrared spectroscopic study of boussingaultite and nickelboussingaultite. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2009, 73, 420-423.	3.9	9
61	Salts of guanidine derivatives - new materials for non-linear optics. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2009, 65, s63-s64.	0.3	0
62	Novel compounds of 4-amino-1,2,4-triazole with dicarboxylic acids – crystal structures, vibrational spectra and non-linear optical properties. <i>Journal of Molecular Structure</i> , 2008, 873, 46-60.	3.6	80
63	Inorganic salts of biguanide – Searching for new materials for second harmonic generation. <i>Journal of Molecular Structure</i> , 2008, 886, 103-120.	3.6	27
64	The crystal structure, vibrational spectra, thermal behaviour and second harmonic generation of aminoguanidinium(1+) hydrogen l-tartrate monohydrate. <i>Journal of Molecular Structure</i> , 2007, 832, 101-107.	3.6	32
65	Novel material for second harmonic generation: 3-Amino-1,2,4-triazolinium(1+) hydrogen l-tartrate. <i>Journal of Molecular Structure</i> , 2007, 834-836, 328-335.	3.6	24
66	Piperidinium Nitrate - Study of Thermal Behaviour and Vibrational Spectra. <i>Collection of Czechoslovak Chemical Communications</i> , 2006, 71, 207-214.	1.0	1
67	Synthesis and coordination properties of palladium(II) and platinum(II) complexes with phosphonated triphenylphosphine derivatives. <i>Journal of Organometallic Chemistry</i> , 2006, 691, 2409-2423.	1.8	20
68	Nanostructured Porous Silicon – Optical Properties, Surface Modification and Sensor Applications. <i>Chimia</i> , 2005, 59, 222-225.	0.6	4
69	Quantitative structure–property relationships of new benzoxazines and their electrooxidation as a model of metabolic degradation. <i>Electrochimica Acta</i> , 2005, 50, 1431-1437.	5.2	26
70	Bis[(5 <i>RS</i> ,11 <i>RS</i> )-2,8-dimethyl-5,10-methano-5,6,11,12-tetrahydrodibenzo[ <i>b,f</i> ][1,5]diazocine-5-ium dihydrogen phosphate] tris(phosphoric acid) methanol solvate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2005, 61, o3941-o3943.	0.2	2
71	Two phases of bis(tetraethylammonium) di- $\frac{1}{4}$ -chloro-bis[dichloropalladium(II)]. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2004, 60, m426-m430.	0.4	4
72	Bis(tetramethylammonium) tetrachloropalladate(II). <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2004, 60, m924-m926.	0.2	2

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73	The structural phase transitions of aminoguanidinium(1+) dihydrogen phosphate study of crystal structures, vibrational spectra and thermal behavior. <i>Journal of Solid State Chemistry</i> , 2004, 177, 4655-4664.	2.9	33
74	The crystal structure, vibrational spectra, and thermal behavior of dilithium piperazinium(2+) selenate tetrahydrate and dilithium N,N-dimethylpiperazinium(2+) selenate tetrahydrate. <i>Journal of Solid State Chemistry</i> , 2003, 170, 308-319.	2.9	18
75	Preparation, crystal structure, vibrational spectra and thermal behavior of selenites of ethylene diamine, 1,3-propylene diamine and 1,4-butylene diamine. <i>Journal of Solid State Chemistry</i> , 2003, 170, 390-403.	2.9	6
76	STRUCTURE-PROPERTY RELATIONSHIPS OF THIOACRIDINES; THEIR ELECTROCHEMICAL OXIDATION AS A MODEL OF METABOLIC DEGRADATION. <i>Analytical Letters</i> , 2002, 35, 1617-1629.	1.8	6
77	Novel Materials for Second Harmonic Generation - Salts of L-Valine and Selenic Acid. <i>Materials Research Society Symposia Proceedings</i> , 2002, 725, 1.	0.1	1
78	Effect of structure on antibiotic action of new 9-(ethylthio)acridines. <i>Folia Microbiologica</i> , 2002, 47, 118-120.	2.3	4
79	Preparation, crystal structure, vibrational spectra and thermal behaviour of piperazinium(2+) selenite monohydrate and piperazinium(2+) diselenite. <i>Journal of Molecular Structure</i> , 2002, 606, 101-116.	3.6	34
80	The Crystal Structure and Vibrational Spectra of Mono-L-valinium Nitrate: DSC, FTIR, and X-ray Diffractonal Study of Low-Temperature Phase Transition. <i>Journal of Solid State Chemistry</i> , 2001, 158, 1-13.	2.9	8
81	Preparation, Crystal Structure, Vibrational Spectra, and Thermal Behavior of N,N-Dimethylpiperazinium(2+) Hydrogen Selenite. <i>Journal of Solid State Chemistry</i> , 2001, 161, 312-318.	2.9	7
82	Substituent effects on the thioamide group in thiobenzanilides: simultaneous conformational and acid-base equilibria. <i>Journal of Physical Organic Chemistry</i> , 2000, 13, 127-132.	1.9	7
83	The Crystal Structure, Vibrational Spectra, and Thermal Behavior of Piperazinium(2+) Selenate Monohydrate and N,N-Dimethylpiperazinium(2+) Selenate Dihydrate. <i>Journal of Solid State Chemistry</i> , 2000, 150, 305-315.	2.9	31
84	A New Lithium Hydrogen Tellurate LiH <sub>5</sub> TeO <sub>6</sub> . <i>Journal of Solid State Chemistry</i> , 2000, 150, 410-415.	2.9	9
85	Antifungal properties of substituted 1-phenyl-5-mercaptotetrazoles and their oxidation product, 5-bis-(1-phenyltetrazolyl)disulfide. <i>Folia Microbiologica</i> , 2000, 45, 138-142.	2.3	9
86	The crystal structure, vibrational spectra and DSC measurement of mono-L-alaninium nitrate. <i>Journal of Molecular Structure</i> , 1999, 476, 243-253.	3.6	26
87	The crystal structure, vibrational spectra and DSC measurements of mono-L-alaninium nitrate. <i>Journal of Molecular Structure</i> , 1999, 476, 203-213.	3.6	15
88	FTIR and FT Raman study of L-leucine addition compound with nitric acid. <i>Journal of Molecular Structure</i> , 1999, 482-483, 23-28.	3.6	7
89	Electrochemical Oxidation of Probucol in Anhydrous Acetonitrile. <i>Collection of Czechoslovak Chemical Communications</i> , 1999, 64, 1100-1110.	1.0	2
90	Study of the Family of Glycine Selenious Acid Addition Compounds: Crystal Structure of Diglycine Hydrogen Selenite and Vibrational Spectra and DSC Measurement of Diglycine Hydrogen Selenite and Monoglycine Selenious Acid Crystals. <i>Journal of Solid State Chemistry</i> , 1998, 140, 71-82.	2.9	31

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91	Antifungal effects of new heterocyclic compounds, 6H-pyrimido[2,1-a]isoindole derivatives. <i>Folia Microbiologica</i> , 1998, 43, 39-41.	2.3	14
92	Synthesis of new polymers involving deltahedral carborane units. <i>Macromolecular Chemistry and Physics</i> , 1997, 198, 193-218.	2.2	13
93	Crystal Structure and Infrared Absorption Spectra of Magnesium(II) Hydrogen Selenite Tetrahydrate, $Mg(HSeO_3)_2 \cdot 4H_2O$ . <i>Journal of Solid State Chemistry</i> , 1996, 122, 338-342.	2.9	22
94	Crystal Structure, Thermal Behavior, and Infrared Absorption Spectrum of Cobalt(II) Hydrogen Selenite Dihydrate $Co(HSeO_3)_2 \cdot 2H_2O$ . <i>Journal of Solid State Chemistry</i> , 1994, 112, 237-242.	2.9	23
95	Electrochemical oxidation of thiobenzanilide. <i>Electroanalysis</i> , 1994, 6, 75-78.	2.9	5
96	The effect of the structure of the substituent in position ten on the voltammetric behaviour of phenothiazin derivatives. <i>Collection of Czechoslovak Chemical Communications</i> , 1990, 55, 63-71.	1.0	8
97	Determination of chlorpromazine and thioridazine by differential pulse voltammetry in acetonitrile medium. <i>Talanta</i> , 1986, 33, 467-470.	5.5	46
98	Study of the electrochemical oxidation of phenothiazine derivatives in acetonitrile medium. <i>Microchemical Journal</i> , 1985, 32, 33-43.	4.5	11
99	A spectrophotometric study of the reaction of tin with bromopyrogallol red in the presence of cetylpyridinium bromide. <i>Analytica Chimica Acta</i> , 1980, 115, 279-284.	5.4	11
100	Study of the electrochemical oxidation of phenothiazine derivatives in acetonitrile medium: The effect of the structure on the voltammetric behavior. <i>Microchemical Journal</i> , 1980, 25, 551-566.	4.5	5
101	Gas chromatographic, spectrophotometric and electrochemical behavior of substituted s-triazines. <i>Journal of Chromatography A</i> , 1978, 148, 273-281.	3.7	28
102	The voltammetric study of some phenanthroline-type complexes and of ferrocene with a platinum rotating disk electrode in acetonitrile. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1971, 31, 161-173.	0.1	16
103	The voltammetry of triarylmethane dyes in acetonitrile. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1971, 30, 506-510.	0.1	15
104	Some kinetic data on the oxidation of the cobalt(ii)-bipyridyl complex by copper(ii) and iron(iii) perchlorates in anhydrous acetonitrile. <i>Analytica Chimica Acta</i> , 1970, 49, 541-555.	5.4	8
105	Electrochemical oxidation of some aromatic amines in acetonitrile medium. <i>Microchemical Journal</i> , 1967, 12, 350-370.	4.5	9
106	Electrochemical oxidation of some aromatic amines in acetonitrile medium. I. N,N-dimethylaniline, triphenylamine, diphenylamine and di-4-tolylamine. <i>Microchemical Journal</i> , 1967, 12, 99-116.	4.5	31
107	Electrochemical oxidation of some aromatic amines in acetonitrile medium. <i>Microchemical Journal</i> , 1967, 12, 324-349.	4.5	29
108	A study of the properties of lead tetraacetate as oxidizing and oxidimetric agent in analytical chemistry. <i>Microchemical Journal</i> , 1966, 11, 153-171.	4.5	1

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109	Study of the properties of lead tetraacetate as oxidizing and oxidimetric reagent in analytical chemistry. <i>Microchemical Journal</i> , 1966, 11, 172-182.	4.5	4
110	Oxydimetrische Bestimmung des Osmiums in alkalischem Medium. <i>Mikrochimica Acta</i> , 1966, 54, 10-16.	5.0	3
111	Study of the properties of lead tetraacetate as oxidizing and oxidimetric reagent in analytical chemistry. <i>Microchemical Journal</i> , 1966, 11, 183-192.	4.5	0
112	Oxydimetrische Osmiumbestimmung im sauren Medium. <i>Collection of Czechoslovak Chemical Communications</i> , 1966, 31, 2679-2688.	1.0	2
113	Investigation of the formal redox potentials of the system $Pb^{4+}/Pb^{2+}$ with regard to the use of lead tetraacetate in volumetric analysis. <i>Journal of Electroanalytical Chemistry</i> (1959), 1962, 4, 150-155.	0.1	5
114	Potentiometric oxidimetric determination of ruthenium with lead tetraacetate. <i>Microchemical Journal</i> , 1962, 6, 525-537.	4.5	6
115	Potentiometric study of the oxidation of trivalent molybdenum by lead tetraacetate. <i>Journal of Electroanalytical Chemistry</i> (1959), 1962, 3, 278-282.	0.1	2