List of Publications

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For full list of publications including all Proceedings articles, see profile on ResearchGate:
https://www.researchgate.net/profile/Wolfgang_Kiefer/
Most of the papers can be downloaded from there.

2014

A. Cuellar, M. Alcolea Palafox, V.K. Rastogi, W. Kiefer,
S. Schlücker, S.K. Rathor
"FT-IR and FT-Raman spectra of 5-fluoroorotic acid with solid state simulation by DFT methods"
Spectrochim. Acta A, **132**, 430-445 (2014)

J. Klein, A. Beckmann, W. Kiefer, A. Haussmann, L.M. Eng
"Differentiating charged from non-charged ferroelectric domain walls in single crystalline $LiNbO_3$ by μ-CARS and μ-Raman spectroscopy"
Proc. XXIVth International Conference on Raman Spectroscopy, J. Popp and V. Deckert, Eds., 1206-1207 , 2014

A. Cuellar, M. Alcolea Palafox, V.K. Rastogi, W. Kiefer
"Solid state simulation of the FT-IR and FT-Raman spectra of 5-fluororotic and 5-chloroorotic acids"
Proc. XXIVth International Conference on Raman Spectroscopy, J. Popp and V. Deckert, Eds., 1226-1227 , 2014

2012

W. Kiefer, V. Pfeufer, P. Vogt
"High-resolution Raman spectroscopy with optically pumped semiconductor lasers"
Spectroscopy (Duluth, MN, United States) **27**, 28-35 (2012)

2010

I. Georgieva, I. Kostova, N. Trendafilova, V.K. Rastogi, W. Kiefer
"DFT, IR, Raman and NMR study of the coordination ability of coumarin-3-carboxylic acid to Pr(III)"
J. Molecular Structure **979**, 115-121 (2010)

N. Leopold, S. Cinta-Pinzaru, L. Szabo, D. Ilesan, V. Chis, O. Cozar, W. Kiefer

"Raman and SERS study of metoclopramide at different pH values"
J. Raman Spectroscopy, **41**, 248-255 (2010)

Kostova I., Kiefer W., Momekov G.
"Vibrational Characterization of a New Complex of Gadolinium(III) with Cytotoxic Activity"
2010 DOI 10.1063 1.3482703

A. Dem, M. Schmitt, W. Kiefer, J.Popp
"Physical Chemistry and Biophysics of single trapped microparticles"
Advanced Series in Applied Physics **6**, 107-128 (2010)

V.K. Rastogi, M. Alcolea Palafox, A. Guerrero-Martinez, G. Tardajos, J.K. Vats, I. Kostova, S. Schlücker, W. Kiefer
"FT-IR and FT-Raman spectra, ab initio and density functional computations of the vibrational spectra, molecular geometry, atomic charges and some molecular properties of the biomolecule 5-iodouracil"
J. Mol. Structure: THEOCHEM **940**, 29-44 (2010)

I. Kostova, W. Kiefer, G. Momekov
"Vibrational characterization of a new complex of gadolinium(III) with cytotoxic activity"
Proc. XXIIth International Conference on Raman Spectroscopy, P.M. Champion and L.D. Ziegler, Eds., 607-608, 2010.

2009

W. Kiefer
"Recent advances in linear and non-linear Raman spectroscopy. Part III"
J. Raman Spectrosc. **40**, 1766-1779 (2009)

A.S. Grabtchikov, V.A. Lisinetskii, V. A. Orlovich, M. Schmitt, S. Schlücker, B. Küstner, W. Kiefer
"Continuous-wave solid-state two-Stokes Raman laser"
Quantum Electronics **39**, 624-62 (2009)

V. Vikram, S.K. Srivastava, A.K. Ojha, S. Schlücker, W. Kiefer, R.K. Singh
"Dynamics and mechanism of the Crystal II smecticG phase transition in TB7A by a temperature-dependent micro-Raman study and DFT calculations"
J. Raman Spectrosc. **40**, 881-888 (2009)

Singh, Deepa; Ojha, Animesh K.; Kiefer, W.; Singh, Ranjan K.

"Raman and DFT study of static, dynamic interactions and isotope effect in pyridazine + H_2O/D_2O systems"
Vibrational Spectroscopy 49, 242-250 (2009)

S. Schlücker, W. Kiefer
"Selective detection of proteins and nucleic acids with biofunctionalized SERS labels"
Edited by Laane, Jaan
Frontiers of Molecular Spectroscopy, 267 (2009)

2008

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"Recent advances in linear and nonlinear Raman spectroscopy II"
J. Raman Spectrosc. **39**, 1710-1725 (2008)

I. Kostova, N. Trendafilova, I. Georgieva, V.K. Rastogi, W. Kiefer
"Experimental and Theoretical Studies on Biologically Active Lanthanide(III) Complexes"
AIP Conference Proceedings 1075(Perspectives in Vibrational Spectroscopy), 47-51 (2008)

D. Singh, K. Vikram, D.K. Singh, W. Kiefer, R.K. Singh
"Raman and DFT study of hydrogen-bonded 2- and 3-chloropyridine with methanol"
J. Raman Spectroscopy **39**, 1423-1432 (2008)

I. Kostova, V.K. Rastogi, W. Kiefer
"Vibrational spectroscopic investigation on the binding modes in Gd(III) and Dy(III) complexes"
J. Optoelectronics and Advanced Materials **10**, 1345-1352 (2008)

N. Peica, W. Kiefer
"Characterization of indigo carmine with surface-enhanced resonance Raman spectroscopy (SERRS) using silver colloids and island films, and theoretical calculations"
J. Raman Spectrosc. 3, 47-60 (2008)

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C. Schmuck, P. Wich, B. Küstner, W. Kiefer, S. Schlücker
Direkte und markierungsfreie Detektion von festphasengebundenen Substanzen durch oberflächenverstärkte Raman-Streuung
Angew. Chemie **119**, 4870-4873 (2007)

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A.K. Ojha, S.K. Srivastava, S. Schlücker, W. Kiefer, B.P. Asthana, R.K. Singh
"Improper hydrogen bonding and motional narrowing in binary mixtures of 2- and 3-bromopyridine in methanol probed by polarized Raman study and DFT calculations"
J. Raman Spectrosc. 38, 1656-1664 (2007)

W. Kiefer
"Recent advances in linear and nonlinear Raman spectroscopy. Part I"
J. Raman Spectrosc. 38, 1538-1553 (2007)

I. Kostova, W. Kiefer, G. Momekov
"Cytotoxic activity of Gd(III)- and Dy(III)-complexes"
Archiv der Pharmazie (Weinheim, Germany) 340, 642-649 (2007)

M.A. Palafox, G. Tardajos, A. Guerrero-Martinez, V.K. Rastogi, D. Mishra, S. Ojha, W. Kiefer
"FT-IR, FT-Raman spectra, density functional computations of the vibrational spectra and molecular geometry of biomolecule 5-aminouracil"
Chem. Phys. **340**, 17-31 (2007)

N. Peica, C. Lehene, N. Leopold, O. Cozar, W. Kiefer
"Raman and surface-enhanced Raman studies of the food additive sodium "
J. Optoelectronics and Advanced Materials **9**, 2943-2948 (2007)

V.K. Rastogi, M.A. Palafox, L. Mittal, N. Peica, W. Kiefer, K. Lang, S.P. Ojha
"FTIR and FT-Raman spectra and density functional computations of the vibrational spectra, molecular geometry and atomic charges of the biomolecule: 5-bromouracil"
J.Raman Spectrosc. 38, 1227-1241 (2007)

S. Gräfe, W. Kiefer, V. Engel
"On the limitations of adiabatic population transfer between molecular electronic states induced by intense femtosecond laser pulses"
J. Chem. Phys. **127**, 134306/1-134306/6. (2007)

S. Graefe, D.A. Akimov, B. Boehm, A.M. Zheltikov, M.O. Scully, W. Kiefer, V. Engel, T. Siebert
"Strong-field dressing of vibrational manifolds within ultrafast coherent Raman excitation"
J. Raman Spectrosc. 38, 998-1005 (2007)

C. Schmuck, P. Wich, B. Kuestner, W. Kiefer, S. Schluecker
"Direct and label-free detection of solid-phase-bound compounds by using surface-enhanced Raman scattering microspectroscopy"
Angewandte Chemie, International Edition **46**, 4786-4789 (2007)

M. Ivanda, K. Furic, S. Music, M. Ristic, M. Gotic, D. Ristic, A.M. Tonejc, I. Djerdj, M. Mattarelli, M. Montagna
"Low wavenumber Raman scattering of nanoparticles and nanocomposite materials"
J. Raman Spectrosc. **38**, 647-659 (2007)

I. Kostova, N. Peica, W. Kiefer
„Theoretical and spectroscopic studies of new lanthanum(III) complex of orotic acid"
Vibrational Spectroscopy **44**, 209-219 (2007)

W. Li, Y.-B. Wang, L.-Y. Yang, A. Szeghalmi, Y. Ye, J.-S. Ma, M.-D. Luo, J.-M. Hu, W. Kiefer
„Spectroscopic and computational studies on self-assembly complexes of bis(pyrrol-2-ylmethyleneamine) ligands linked by alkyl spacers with Cu(II)"
J. Raman Spectrosc. **38**, 483-495 (2007)

B. Dietzek, S. Gräfe, M. Schmitt, A. Yartsev, T. Pascher, V. Sundstrom, W. Kiefer, M.Y. Ivanov
"Experimental Observation of Different-Order Components of a Vibrational Wave Packet in a Bulk Dielectric Using High-Order Raman Scattering"
Phys. Rev. Lett. **98**, 187402/1-187402/4 (2007)

I.Georgieva, N. Trendafilova, W. Kiefer, V.K. Rastogi, I. Kostova
"Vibrational and theoretical study of coumarin-3-carboxylic acid binding mode in Ce(III) and Nd(III) complexes"
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"Theoretical and spectroscopic studies of 5-aminoorotic acid and its new lanthanide(III) complexes"
J. Raman Spectrosc. **38**, 205-216 (2007)

B. Dietzek, D. Akimov, W. Kiefer, S. Rau, J. Popp, M. Schmitt
"Excited-state dynamics of Ru(tbbpy)32+ investigated by femtosecond time-resolved four-wave mixing"
Laser Physics Letters **4**, 121-125 (2007)

S. Cinta-Pinzaru, N. Peica, U. Schmidt, W. Kiefer
„New substrate sample handling and micro-Raman sensing methods for biomolecular analysis"
J. Optoelectronics and Advanced Materials **9**, 768-771 (2007)

S. Cavalu, S. Cinta- Pinzaru N. Peica, G. Damian, W. Kiefer
"Adsorption behavior of hyaluronidase onto silver nanoparticles and PMMA bone substitute"
J. Optoelectronics and Advanced Materials **9**, 686-689 (2007)

I.Kostova, N. Trendafilova, S. Cinta- Pinzaru, W. Kiefer, G. Momekov
"Spectroscopic evidence of La(III) complex of coumarin-3-carboxylic acid with cytotoxic activity"
J. Optoelectronics and Advanced Materials **9**, 532-538 (2007)

A.I. Vodchits, D.N. Busko, V.A. Orlovich, V.A. Lisinetskii, A.S.Grabtchikov, P.A. Apanasevich, W. Kiefer, H.J. Eichler, P.-Y. Turpin, P.-Y.
"Multi-frequency quasi-continuous wave solid-state Raman laser for the ultraviolet, visible, and near infrared"
Optics Communications **272**, 467-475 (2007)

V.K. Rastogi, M.A. Palafox, S. Singhal, S.P. Ojha, W. Kiefer
"Geometrical parameters, vibrational wavenumbers, and relationships established with six difluorobenzonitriles"
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N. Welter, U. Schuessler, W. Kiefer
"Characterization of inorganic pigments in ancient glass beads by means of Raman microspectroscopy, microprobe analysis and x-ray diffractometry"
J. Raman Spectrosc. **38**, 113-121 (2007)

I.Kostova, N. Peica, W. Kiefer
"Raman, FT-IR, and DFT studies of 3,5-pyrazoledicarboxylic acid and its Ce(III) and Nd(III) complexes"
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"Monosodium glutamate in its anhydrous and monohydrate form: Differentiation by Raman spectroscopies and density functional calculations"
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T. Frosch, M. Schmitt, G. Bringmann, W. Kiefer, J. Popp
"Structural Analysis of the Anti-Malaria Active Agent Chloroquine under Physiological Conditions"
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A.K. Ojha, S.K. Srivastava, R.K. Singh, W. Kiefer, B.P. Asthana
"Complex formation of $HCONH_2$ in CH_3OH environment and investigation of linewidth changes of ν(C=O) stretching and NH_2 bending modes"
Vibrational Spectroscopy **43**, 177-183 (2007)

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"Vibrational spectroscopic investigation on the binding modes in Zr(IV) complexes of coumarins"
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A.A. Ivanov, Y.M. Linik, D.A. Akimov, M.V. Alfimov, T. Siebert, W. Kiefer and A.M. Zheltikov
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"Raman-microscopy for in situ planetary science"
Proc. 39th ESLAB Symp., F. Favata and A. Gimenez, Eds., SP-588, 385-388 (2005).

A.I. P.D. Persans, , K. Babocsi, M. Schmitt, W. Kiefer, V.D. Kulakovskii and N.A. Nippius
"Effect of nanocrystal growth conditions on exciton decay and spin dephasing in an ensemble of CdSe nanocrystal grown in glass"
Phys. Rev. **B, 73**, 125322/1-10 (2006).

D. Rohleder, G. Kocherscheidt, K. Gerber, W. Kiefer, W. Koehler, J. Moecks and

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"Vibrational spectroscopy as a routine tool for the quantitative analysis of serum?"
Proc. SPIE, Biomedical Vibrational Spectroscopy III : **609304**, 1-9 (2006).

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D. Muresan, M. Vasilescu, I. Balasz, C. Popa, W. Kiefer and S. Simon
"Structural investigation of calcium-soda-phosphate glasses with small content of silver oxide"
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S. K. Srivastava, A.K. Ojha, P. Raghuvansh, W. Kiefer, B.P. Asthana
"Influence of self-association and inter-molecular hydrogen bonding on the ν(C≡N) stretching mode of CH3C≡N and C2H5C≡N in binary mixtures with CH3OH - a comparative study via concentration-dependent polarized Raman study and ab initio calculation"
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"Raman, FT-IR and DFT studies of ortho-, meta- and para-pyridinomethylene substituted di(4-hydroxycoumarin) and their Ce(III), La(III) and Nd(III) complexes"
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"Ultrafast excited-state excitation dynamics in a quasi-two-dimensional light-harvesting antenna"
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