Reiner Salzer

List of Publications by Year
in descending order

104 papers	3,352 citations	159358 30 h-index	149479 56 g-index
136 all docs	136 docs citations	136 times ranked	3865 citing authors

#	Article	IF	Citations
1	Near infrared Raman spectra of human brain lipids. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 61, 1529-1535.	2.0	471
2	Disease recognition by infrared and Raman spectroscopy. Journal of Biophotonics, 2009, 2, 13-28.	1.1	258
3	Mapping of single cells by near infrared Raman microspectroscopy. Vibrational Spectroscopy, 2003, 32, 75-83.	1.2	170
4	Near infrared Raman spectroscopic mapping of native brain tissue and intracranial tumors. Analyst, The, 2005, 130, 1070.	1.7	145
5	Raman spectroscopic imaging for in vivo detection of cerebral brain metastases. Analytical and Bioanalytical Chemistry, 2010, 398, 1707-1713.	1.9	141
6	Quantification of brain lipids by FTIR spectroscopy and partial least squares regression. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2009, 71, 2069-2075.	2.0	131
7	Studies on Stress-Induced Changes at the Subcellular Level by Raman Microspectroscopic Mapping. Analytical Chemistry, 2006, 78, 4424-4429.	3.2	128
8	In situ conformational analysis of fibrinogen adsorbed on Si surfaces. Colloids and Surfaces B: Biointerfaces, 2005, 42, 219-225.	2.5	125
9	Methodology for fiber-optic Raman mapping and FTIR imaging of metastases in mouse brains. Analytical and Bioanalytical Chemistry, 2007, 389, 1133-1142.	1.9	111
10	Characterization of lipid extracts from brain tissue and tumors using Raman spectroscopy and mass spectrometry. Analytical and Bioanalytical Chemistry, 2009, 393, 1513-1520.	1.9	93
11	Identification of primary tumors of brain metastases by SIMCA classification of IR spectroscopic images. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 883-891.	1.4	89
12	Identification of organelles and vesicles in single cells by Raman microspectroscopic mapping. Vibrational Spectroscopy, 2005, 38, 85-93.	1.2	87
13	Raman and infrared spectroscopic mapping of human primary intracranial tumors: a comparative study. Journal of Raman Spectroscopy, 2006, 37, 367-375.	1.2	76
14	Analysis of human brain tissue, brain tumors and tumor cells by infrared spectroscopic mapping. Analyst, The, 2004, 129, 921.	1.7	75
15	Delimitation of squamous cell cervical carcinoma using infrared microspectroscopic imaging. Analytical and Bioanalytical Chemistry, 2006, 384, 145-154.	1.9	75
16	Conformational Changes during Protein Adsorption. FT-IR Spectroscopic Imaging of Adsorbed Fibrinogen Layers. Analytical Chemistry, 2007, 79, 1311-1316.	3.2	75
17	Classification of malignant gliomas by infrared spectroscopic imaging and linear discriminant analysis. Analytical and Bioanalytical Chemistry, 2007, 387, 1669-1677.	1.9	70
18	Distinguishing and grading human gliomas by IR spectroscopy. Biopolymers, 2003, 72, 464-471.	1.2	65

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19	Classification of malignant gliomas by infrared spectroscopy and linear discriminant analysis. Biopolymers, 2006, 82, 301-305.	1.2	65
20	Differentiation of individual human mesenchymal stem cells probed by FTIR microscopic imaging. Analyst, The, 2007, 132, 647.	1.7	61
21	Hydrogel-Based Piezoresistive pH Sensors:â€‰Investigations Using FT-IR Attenuated Total Reflection Spectroscopic Imaging. Analytical Chemistry, 2008, 80, 2957-2962.	3.2	61
22	Investigations on hydrogen spillover. Part 1.â€”Electrical conductivity studies on titanium dioxide. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 1091-1095.	1.7	54
23	Variance reduction in estimating classification error using sparse datasets. Chemometrics and Intelligent Laboratory Systems, 2005, 79, 91-100.	1.8	47
24	Identification of Primary Tumors of Brain Metastases by Infrared Spectroscopic Imaging and Linear Discriminant Analysis. Technology in Cancer Research and Treatment, 2006, 5, 291-298.	0.8	46
25	Assessing and improving the stability of chemometric models in small sample size situations. Analytical and Bioanalytical Chemistry, 2008, 390, 1261-1271.	1.9	46
26	Identification of tumor tissue by FTIR spectroscopy in combination with positron emission tomography. Vibrational Spectroscopy, 2002, 28, 103-110.	1.2	43
27	Validation of soft classification models using partial class memberships: An extended concept of sensitivity & co. applied to grading of astrocytoma tissues. Chemometrics and Intelligent Laboratory Systems, 2013, 122, 12-22.	1.8	43
28	Raman spectroscopic grading of astrocytoma tissues: using soft reference information. Analytical and Bioanalytical Chemistry, 2011, 400, 2801-2816.	1.9	39
29	Suitability of infrared spectroscopic imaging as an intraoperative tool in cerebral glioma surgery. Analytical and Bioanalytical Chemistry, 2009, 393, 187-195.	1.9	33
30	Rapid Access to Infrared Reference Spectra of Arbitrary Organic Compounds: Scope and Limitations of an Approach to the Simulation of Infrared Spectra by Neural Networks. Chemistry - A European Journal, 2000, 6, 920-927.	1.7	32
31	Identification of B and T cells in human spleen sections by infrared microspectroscopic imaging. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2005, 64A, 53-61.	1.1	31
32	Rapid and labelâ€free classification of human glioma cells by infrared spectroscopic imaging. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2008, 73A, 1158-1164.	1.1	23
33	Photoresponsive upper-rim azobenzene substituted calix[4]resorcinarenes. Tetrahedron Letters, 2005, 46, 3377-3379.	0.7	17
34	Smartphones as audience response systems for lectures and seminars. Analytical and Bioanalytical Chemistry, 2018, 410, 1609-1613.	1.9	17
35	Characterization of Metal-Supported Poly(methyl methacrylate) Microstructures by FTIR Imaging Spectroscopy. Langmuir, 2006, 22, 4125-4130.	1.6	16
36	SPR imaging as a tool for detecting mucin â€“ anti-mucin interaction. Outline of the development of a sensor for near-patient testing for mucin. Mikrochimica Acta, 2007, 158, 219-225.	2.5	15

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37	Quantitative determination of cationic modified polysaccharides on hair using LCâ€“MS and LCâ€“MSâ€“MS. Analytical and Bioanalytical Chemistry, 2005, 381, 1401-1407.	1.9	14
38	Intra-operative optical diagnostics with vibrational spectroscopy. Analytical and Bioanalytical Chemistry, 2011, 400, 2745-2753.	1.9	12
39	Internet Teaching: Laboratory Course in Analytical Chemistry. Mikrochimica Acta, 2003, 142, 153-159.	2.5	11
40	Near-infrared Raman spectroscopy to study the composition of human brain tissue and tumors. , 2003, , .		9
41	Highâ€Impact Sulfur Compounds: Constitutional and Configurational Assignment of Sulfurâ€Containing Heterocycles. Chemistry and Biodiversity, 2008, 5, 1204-1212.	1.0	9
42	Zur ObjektivitÃt digitaler Bandentrennungen. Zeitschrift FÃ¼r Chemie, 1980, 20, 117-122.	0.0	8
43	Guest Editorial: The Professional Status of European Chemists and Chemical Engineers. Chemistry - A European Journal, 2015, 21, 9921-9935.	1.7	8
44	Integration of ion channel proteins into a polymer matrixâ€“ investigation by the patch-clamp technique. Macromolecular Symposia, 2001, 164, 239-246.	0.4	7
45	Analytical chemistry in the European higher education area. Analytical and Bioanalytical Chemistry, 2005, 381, 33-40.	1.9	7
46	Determination of configurational isomers in cyclic polysulfides by Raman spectroscopy. Vibrational Spectroscopy, 2007, 43, 49-52.	1.2	7
47	Master programs in analytical chemistry. Analytical and Bioanalytical Chemistry, 2009, 394, 649-653.	1.9	7
48	In situ investigation of solid state lon exchange in zeolites using Fourier transform infrared spectroscopy. Analyst, The, 1992, 117, 351.	1.7	6
49	Linked Curriculum â€“ Chemistry: Different from a Virtual University Vernetztes Studium â€“ Chemie: anders als eine virtuelle UniversitÃt. Chimia, 2003, 57, 105-115.	0.3	6
50	Polarization Modulation-Infrared Reflection Absorption Spectroscopic Mapping. Analytical Chemistry, 2006, 78, 2487-2493.	3.2	6
51	Changing careers in chemistry. Analytical and Bioanalytical Chemistry, 2012, 402, 25-28.	1.9	6
52	Employment and Careers of European Chemists (ESEC2). Chemistry - A European Journal, 2018, 24, 17370-17388.	1.7	6
53	Infrared and Raman spectra, ab initio calculations and conformational studies of ethyl iodosilane. Journal of Molecular Structure, 2003, 644, 105-118.	1.8	5
54	Solution to Spectroscopy Challenge 7. Analytical and Bioanalytical Chemistry, 2004, 380, 734-735.	1.9	5

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55	ATR-FT-IR Imaging for Pharmaceutical and Polymeric Materials: From Micro to Macro Approaches. , 0, , 347-375.		5
56	PM-IRRAS mapping of ultrathin molecular films with high spatial resolution. Analytical and Bioanalytical Chemistry, 2009, 395, 1641-1650.	1.9	5
57	Schwingungsspektroskopie im Nahen Infrarot. Zeitschrift FÃ¼r Chemie, 1986, 26, 275-284.	0.0	4
58	Analytical biophotonics. Analytical and Bioanalytical Chemistry, 2011, 400, 2685-2686.	1.9	4
59	Educating tomorrowâ€™s chemists. Analytical and Bioanalytical Chemistry, 2014, 406, 3251-3255.	1.9	4
60	Ãœber die Integralabsorption der CXâ€Valenzschwingungen homologer 1â€substituierter geradkettiger Alkanderivate. Zeitschrift FÃ¼r Chemie, 1973, 13, 30-31.	0.0	3
61	FTi.r. (DRIFT-) investigation of glass-covered samples: Raman background and the acid strength of H-erionites. Zeolites, 1991, 11, 694-698.	0.9	3
62	Optical biosensor array based on natural ion channels. , 2003, , .		3
63	Strukturgruppenanalyse an Kohlenwasserstoffgemischen im NIR. Zeitschrift FÃ¼r Chemie, 1985, 25, 263-264.	0.0	3
64	Education and careers of European analytical chemists. Analytical and Bioanalytical Chemistry, 2015, 407, 639-643.	1.9	3
65	HPLCâ€FTIR identification of reactive diluents in epoxy resins. Makromolekulare Chemie Macromolecular Symposia, 1991, 52, 261-268.	0.6	2
66	Surface-enhanced FTIR spectroscopy and surface plasmon resonance on biomembranes. , 2000, 3918, 215.		2
67	Investigation on native vesicles containing the nicotinic acetylcholine receptor using FTIR-spectroscopy. Journal of Molecular Structure, 2001, 570, 153-158.	1.8	2
68	<title>Probing brain cancer by fiber optic FTIR spectroscopy</title>. , 2002, , .		2
69	Spectral staining of tumor tissue by fiber optic FTIR spectroscopy. , 2003, 5047, 362.		2
70	Molecular imaging. Analytical and Bioanalytical Chemistry, 2007, 389, 1101-1102.	1.9	2
71	Applications of surface-enhanced spectroscopic techniques to biosystems. , 1998, , .		1
72	<title>Investigation of functionalized biomembranes by ATR-SEIRA spectroscopy with polarized light</title>. , 1998, , .		1

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73	Analytische Chemie 1999. Nachrichten Aus Der Chemie, 2000, 48, 348-354.	0.0	1
74	<title>Identification of cancer cells by a combination of FTIR spectroscopy and PET</title>. , 2000, 3920, 93.		1
75	Characterization of ultra-thin polymer films by polarization modulation FTIR spectroscopy. Macromolecular Symposia, 2001, 164, 159-166.	0.4	1
76	<title>Detection and grading of human gliomas by FTIR spectroscopy and a genetic classification algorithm</title>. , 2002, , .		1
77	Trendbericht Analytische Chemie 2000/2001. Nachrichten Aus Der Chemie, 2002, 50, 483-487.	0.0	1
78	Spectroscopy challenge 6. Analytical and Bioanalytical Chemistry, 2004, 379, 1-2.	1.9	1
79	Solution to Spectroscopy Challenge 6. Analytical and Bioanalytical Chemistry, 2004, 380, 5-6.	1.9	1
80	Analytische Chemie 2005. Nachrichten Aus Der Chemie, 2006, 54, 382-389.	0.0	1
81	Molecular Imagingof Microstructured Polymer Surfaces. , 0, , 7-15.		1
82	Quantitative Strukturgruppenanalyse an Kohlen wasserstoffgemischen im NIR. Zeitschrift FÃ¼r Chemie, 1988, 28, 147-148.	0.0	1
83	European Analytical Column. TrAC - Trends in Analytical Chemistry, 2012, 35, 1-3.	5.8	1
84	<title>Spectroscopic investigation of the nicotinic acetylcholine receptor for application in medical diagnosis</title>. , 1998, , .		0
85	Improved Response and Steady State Times For Fibre Optical Sensors by Supported Liquid Membranes. Analytical Letters, 2000, 33, 1247-1264.	1.0	0
86	Analytical partnership. Analytical and Bioanalytical Chemistry, 2003, 375, 4-4.	1.9	0
87	A Tribute to Wilhelm Fresenius. Analytical and Bioanalytical Chemistry, 2003, 376, 765-766.	1.9	0
88	Spectroscopy Challenge 7. Analytical and Bioanalytical Chemistry, 2004, 379, 741.	1.9	0
89	Analytische Chemie 2003. Nachrichten Aus Der Chemie, 2004, 52, 544-553.	0.0	0
90	Health monitoring of biomaterials from molecular fingerprints. , 2004, , .		0

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91	‹title›In vivo investigation of protein adsorption on implant surfaces‹/title›. , 2005, 5768, 19.		0
92	Optical Spectroscopy. , 2005, , 441-468.		0
93	Blood compatibility of artificial blood vessels probed by infrared spectroscopic imaging. , 2006, , .		0
94	Combination of SPR and PM-IRRAS for characterization and detection of biosensor arrays. , 2006, , .		0
95	Infrared spectroscopic imaging with high spatial resolution and high sensitivity. Proceedings of SPIE, 2008, , .	0.8	0
96	Infrarotspektroskopische Untersuchungen zur Erfassung und Interpretation von Bandenformindices. Zeitschrift FÃ¼r Chemie, 2010, 27, 186-187.	0.0	0
97	Direkte HPLC-FTIR-Kopplung zur Identifizierung von Phenolderivaten. Zeitschrift FÃ¼r Chemie, 2010, 29, 215-216.	0.0	0
98	Zur IRâ€spektroskopischen Spurenbestimmung organischer Stoffe. Zeitschrift FÃ¼r Chemie, 1989, 29, 254-255.	0.0	0
99	Zur computergestÃ¼tzten FTIR-spektroskopischen Identifizierung von organischen Stoffgruppen Im Spurenbereich. Zeitschrift FÃ¼r Chemie, 2010, 29, 256-256.	0.0	0
100	Bewertung von IRâ€Konformatiensuntersuchungen mittels Faktoranalyse. Zeitschrift FÃ¼r Chemie, 1990, 30, 256-257.	0.0	0
101	European Analytical Column No. 40. Analytical and Bioanalytical Chemistry, 2012, 404, 5-7.	1.9	0
102	Raman and infrared spectra, conformations and ab initio calculations of 3-methoxymethylene-2,4-pentanedione. Acta Chimica Slovaca, 2015, 8, 203-216.	0.5	0
103	Yury A. Zolotov: Russian contributions to analytical chemistry. Analytical and Bioanalytical Chemistry, 2019, 411, 1493-1494.	1.9	0
104	Fast and Objective Classification of Tumor Tissue by Optical Vibrational Spectroscopy. , 2007, , 378-383.		0