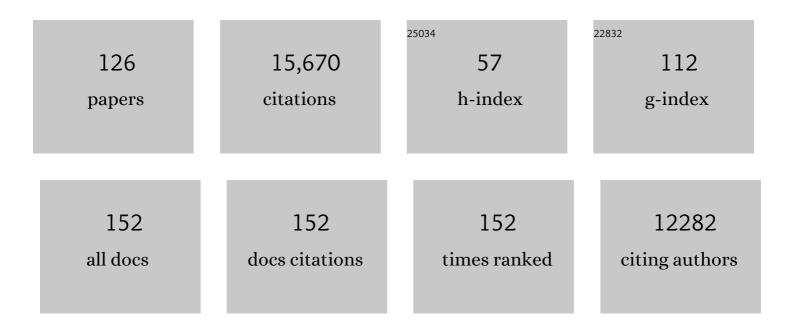
List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/331840/publications.pdf Version: 2024-02-01



JOHN K RöHIKE

#	Article	IF	CITATIONS
1	Isotopic discrimination of natural and anthropogenic perchlorate sources in groundwater in a semi-arid region of northeastern Oregon (USA). Applied Geochemistry, 2022, 139, 105232.	3.0	2
2	Standard atomic weights of the elements 2021 (IUPAC Technical Report). Pure and Applied Chemistry, 2022, 94, 573-600.	1.9	57
3	Determination of vadose zone and saturated zone nitrate lag times using long-term groundwater monitoring data and statistical machine learning. Hydrology and Earth System Sciences, 2021, 25, 811-829.	4.9	12
4	Exploring the Potential of Electrospray-Orbitrap for Stable Isotope Analysis Using Nitrate as a Model. Analytical Chemistry, 2021, 93, 9139-9148.	6.5	15
5	Isotopic composition of natural and synthetic chlorate (δ180, Î`'170, δ37Cl, 36Cl/Cl): Methods and initial results. Chemosphere, 2021, 274, 129586.	8.2	6
6	Origin of the isotopic composition of natural perchlorate: Experimental results for the impact of reaction pathway and initial ClOx reactant. Geochimica Et Cosmochimica Acta, 2021, 311, 292-315.	3.9	6
7	The influence of sample matrix on the accuracy of nitrite N and O isotope ratio analyses with the azide method. Rapid Communications in Mass Spectrometry, 2020, 34, e8569.	1.5	11
8	Degradation of RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine) in contrasting coastal marine habitats: Subtidal non-vegetated (sand), subtidal vegetated (silt/eel grass), and intertidal marsh. Science of the Total Environment, 2020, 745, 140800.	8.0	3
9	Tracing the cycling and fate of the munition, Hexahydro-1,3,5-trinitro-1,3,5-triazine in a simulated sandy coastal marine habitat with a stable isotopic tracer, 15N-[RDX]. Science of the Total Environment, 2019, 647, 369-378.	8.0	7
10	Assessing the Seasonal Dynamics of Nitrate and Sulfate Aerosols at the South Pole Utilizing Stable Isotopes. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8161-8177.	3.3	21
11	Seasonal and Spatial Variation in the Location and Reactivity of a Nitrateâ€Contaminated Groundwater Discharge Zone in a Lakebed. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 2186-2207.	3.0	10
12	Methane and nitrous oxide temporal and spatial variability in two midwestern USA streams containing high nitrate concentrations. Science of the Total Environment, 2019, 685, 574-588.	8.0	15
13	Constraining the Oxygen Isotopic Composition of Nitrate Produced by Nitrification. Environmental Science & Technology, 2019, 53, 1206-1216.	10.0	57
14	Seasonality of nitrate sources and isotopic composition in the Upper Illinois River. Journal of Hydrology, 2019, 568, 849-861.	5.4	19
15	Minimum energy requirements for desalination of brackish groundwater in the United States with comparison to international datasets. Water Research, 2018, 141, 387-404.	11.3	31
16	IUPAC Periodic Table of the Elements and Isotopes (IPTEI) for the Education Community (IUPAC) Tj ETQq0 0 0 rg	BT /Qverlo	ck 10 Tf 50 1

17	Clarification of the term "normal material―used for standard atomic weights (IUPAC Technical) Tj ETQq1 1 0	.784314 r 1.9	gBT /Overl
18	Four-dimensional isotopic approach to identify perchlorate sources in groundwater: Application to the Rialto-Colton and Chino subbasins, southern California (USA). Applied Geochemistry, 2018, 97,	3.0	12

213-225.

#	Article	IF	CITATIONS
19	Stable isotopic composition of perchlorate and nitrate accumulated in plants: Hydroponic experiments and field data. Science of the Total Environment, 2017, 595, 556-566.	8.0	14
20	Response of deep groundwater to land use change in desert basins of the Transâ€Pecos region, Texas, USA: Effects on infiltration, recharge, and nitrogen fluxes. Hydrological Processes, 2017, 31, 2349-2364.	2.6	24
21	Densityâ€Driven Freeâ€Convection Model for Isotopically Fractionated Geogenic Nitrate in Sabkha Brine. Ground Water, 2017, 55, 199-207.	1.3	6
22	Tracking the fate of nitrate through pulse-flow wetlands: A mesocosm scale 15N enrichment tracer study. Ecological Engineering, 2017, 106, 597-608.	3.6	21
23	Anoxic nitrate reduction coupled with iron oxidation and attenuation of dissolved arsenic and phosphate in a sand and gravel aquifer. Geochimica Et Cosmochimica Acta, 2017, 196, 102-120.	3.9	74
24	Stable isotope analyses of oxygen (¹⁸ 0: ¹⁷ 0: ¹⁶ 0) and chlorine (³⁷ Cl: ³⁵ Cl) in perchlorate: reference materials, calibrations, methods, and interferences. Rapid Communications in Mass Spectrometry, 2017, 31, 85-110.	1.5	13
25	Chemical Considerations for an Updated National Assessment of Brackish Groundwater Resources. Ground Water, 2016, 54, 464-475.	1.3	17
26	Relating Carbon and Nitrogen Isotope Effects to Reaction Mechanisms during Aerobic or Anaerobic Degradation of RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) by Pure Bacterial Cultures. Applied and Environmental Microbiology, 2016, 82, 3297-3309.	3.1	17
27	A partial exponential lumped parameter model to evaluate groundwater age distributions and nitrate trends in long-screened wells. Journal of Hydrology, 2016, 543, 109-126.	5.4	41
28	Identification of Groundwater Nitrate Contamination from Explosives Used in Road Construction: Isotopic, Chemical, and Hydrologic Evidence. Environmental Science & Technology, 2016, 50, 593-603.	10.0	30
29	Deposition, accumulation, and alteration of Clâr', NO3âr', ClO4âr' and ClO3âr' salts in a hyper-arid polar environment: Mass balance and isotopic constraints. Geochimica Et Cosmochimica Acta, 2016, 182, 197-215.	3.9	42
30	Groundwater movement, recharge, and perchlorate occurrence in a faulted alluvial aquifer in California (USA). Hydrogeology Journal, 2015, 23, 467-491.	2.1	19
31	Global patterns and environmental controls of perchlorate and nitrate co-occurrence in arid and semi-arid environments. Geochimica Et Cosmochimica Acta, 2015, 164, 502-522.	3.9	90
32	Role of Anaerobic Ammonium Oxidation (Anammox) in Nitrogen Removal from a Freshwater Aquifer. Environmental Science & Technology, 2015, 49, 12169-12177.	10.0	78
33	Tracing the Cycling and Fate of the Explosive 2,4,6-Trinitrotoluene in Coastal Marine Systems with a Stable Isotopic Tracer, ¹⁵ N-[TNT]. Environmental Science & Technology, 2015, 49, 12223-12231.	10.0	12
34	Widespread occurrence of (per)chlorate in the Solar System. Earth and Planetary Science Letters, 2015, 430, 470-476.	4.4	42
35	Variation in the terrestrial isotopic composition and atomic weight of argon (IUPAC Technical) Tj ETQq1 1 0.78	4314 rgBT (1.9	Overlock 10
	Educational Webtool Illustrating Groundwater Age Effects on Contaminant Trends in Wells, Ground		

³⁶ Educational Webtool Illustrating Groundwater Age Effects on Contaminant Trends in Wells. Ground Water, 2014, 52, 8-9.

1.3 5

#	Article	IF	CITATIONS
37	Soil, Plant, and Terrain Effects on Natural Perchlorate Distribution in a Desert Landscape. Journal of Environmental Quality, 2014, 43, 980-994.	2.0	29
38	Hyporheic zone denitrification: Controls on effective reaction depth and contribution to whole-stream mass balance. Water Resources Research, 2013, 49, 6298-6316.	4.2	269
39	Application of stable isotope ratio analysis for biodegradation monitoring in groundwater. Current Opinion in Biotechnology, 2013, 24, 542-549.	6.6	25
40	Atomic weights of the elements 2011 (IUPAC Technical Report). Pure and Applied Chemistry, 2013, 85, 1047-1078.	1.9	348
41	Heterogeneous redox conditions, arsenic mobility, and groundwater flow in a fractured-rock aquifer near a waste repository site in New Hampshire, USA. Hydrogeology Journal, 2012, 20, 1189-1201.	2.1	19
42	Factors controlling nitrate fluxes in groundwater in agricultural areas. Water Resources Research, 2012, 48, .	4.2	84
43	Comparison of particle-tracking and lumped-parameter age-distribution models for evaluating vulnerability of production wells to contamination. Hydrogeology Journal, 2012, 20, 263-282.	2.1	117
44	Isotopic Tracing of Perchlorate in the Environment. Advances in Isotope Geochemistry, 2012, , 437-452.	1.4	13
45	Hydrology and Biogeochemistry Linkages. , 2011, , 271-304.		8
46	Ammonium in thermal waters of Yellowstone National Park: Processes affecting speciation and isotope fractionation. Geochimica Et Cosmochimica Acta, 2011, 75, 4611-4636.	3.9	52
47	Biogeochemical Evolution of a Landfill Leachate Plume, Norman, Oklahoma. Ground Water, 2011, 49, 663-687.	1.3	111
48	A comparison of recharge rates in aquifers of the United States based on groundwater-age data. Hydrogeology Journal, 2011, 19, 779-800.	2.1	109
49	Natural Chlorate in the Environment: Application of a New IC-ESI/MS/MS Method with a Cl ¹⁸ O ₃ ⁻ Internal Standard. Environmental Science & Technology, 2010, 44, 8429-8434.	10.0	69
50	Mixing effects on apparent reaction rates and isotope fractionation during denitrification in a heterogeneous aquifer. Water Resources Research, 2010, 46, .	4.2	121
51	Isotopic Composition and Origin of Indigenous Natural Perchlorate and Co-Occurring Nitrate in the Southwestern United States. Environmental Science & Technology, 2010, 44, 4869-4876.	10.0	110
52	Biological and geochemical controls on diel dissolved inorganic carbon cycling in a low-order agricultural stream: Implications for reach scales and beyond. Chemical Geology, 2010, 283, 18-18.	3.3	13
53	Contrasting residence times and fluxes of water and sulfate in two small forested watersheds in Virginia, USA. Science of the Total Environment, 2009, 407, 4363-4377.	8.0	15
54	Biogeochemistry at a wetland sediment–alluvial aquifer interface in a landfill leachate plume. Journal of Contaminant Hydrology, 2009, 105, 99-117.	3.3	39

#	Article	IF	CITATIONS
55	Dynamic modeling of nitrogen losses in river networks unravels the coupled effects of hydrological and biogeochemical processes. Biogeochemistry, 2009, 93, 91-116.	3.5	212
56	Multi-scale measurements and modeling of denitrification in streams with varying flow and nitrate concentration in the upper Mississippi River basin, USA. Biogeochemistry, 2009, 93, 117-141.	3.5	124
57	Nitrification and denitrification in a midwestern stream containing high nitrate: in situ assessment using tracers in dome-shaped incubation chambers. Biogeochemistry, 2009, 96, 189-208.	3.5	19
58	Comprehensive interâ€laboratory calibration of reference materials for <i>δ</i> ¹⁸ O versus VSMOW using various onâ€line highâ€ŧemperature conversion techniques. Rapid Communications in Mass Spectrometry, 2009, 23, 999-1019.	1.5	167
59	Flow and geochemistry of groundwater beneath a back-barrier lagoon: The subterranean estuary at Chincoteague Bay, Maryland, USA. Marine Chemistry, 2009, 113, 78-92.	2.3	20
60	Chlorine-36 as a Tracer of Perchlorate Origin. Environmental Science & Technology, 2009, 43, 6934-6938.	10.0	52
61	Fractionation of stable isotopes in perchlorate and nitrate during in situ biodegradation in a sandy aquifer. Environmental Chemistry, 2009, 6, 44.	1.5	34
62	A simple technique for continuous measurement of timeâ€variable gas transfer in surface waters. Limnology and Oceanography: Methods, 2009, 7, 185-195.	2.0	40
63	Atacama Perchlorate as an Agricultural Contaminant in Groundwater: Isotopic and Chronologic Evidence from Long Island, New York. Environmental Science & Technology, 2009, 43, 5619-5625.	10.0	72
64	Effects of nitrate and water on the oxygen isotopic analysis of barium sulfate precipitated from water samples. Rapid Communications in Mass Spectrometry, 2008, 22, 4109-4120.	1.5	15
65	Mass balance and isotope effects during nitrogen transport through septic tank systems with packed-bed (sand) filters. Science of the Total Environment, 2008, 407, 324-332.	8.0	39
66	Source and transport controls on the movement of nitrate to public supply wells in selected principal aquifers of the United States. Water Resources Research, 2008, 44, .	4.2	75
67	Simulated response of water quality in public supply wells to land use change. Water Resources Research, 2008, 44, .	4.2	34
68	Ecohydrological Factors Affecting Nitrate Concentrations in a Phreatic Desert Aquifer in Northwestern China. Environmental Science & Technology, 2008, 42, 3531-3537.	10.0	41
69	Limited Occurrence of Denitrification in Four Shallow Aquifers in Agricultural Areas of the United States. Journal of Environmental Quality, 2008, 37, 994-1009.	2.0	108
70	Effects of Mother Lode-Type Gold Mineralization on 187Os/188Os and Platinum Group Element Concentrations in Peridotite: Alleghany District, California. Economic Geology, 2007, 102, 1079-1089.	3.8	4
71	The oxygenâ€18 isotope approach for measuring aquatic metabolism in high productivity waters. Limnology and Oceanography, 2007, 52, 1439-1453.	3.1	80
72	Effects of surface-water irrigation on sources, fluxes, and residence times of water, nitrate, and uranium in an alluvial aquifer. Applied Geochemistry, 2007, 22, 152-174.	3.0	60

#	Article	IF	CITATIONS
73	Aquifer-scale controls on the distribution of nitrate and ammonium in ground water near La Pine, Oregon, USA. Journal of Hydrology, 2007, 333, 486-503.	5.4	66
74	Oxygen and Chlorine Isotopic Fractionation during Perchlorate Biodegradation:Â Laboratory Results and Implications for Forensics and Natural Attenuation Studies. Environmental Science & Technology, 2007, 41, 2796-2802.	10.0	71
75	Isotopic Analysis of N and O in Nitrite and Nitrate by Sequential Selective Bacterial Reduction to N2O. Analytical Chemistry, 2007, 79, 5888-5895.	6.5	66
76	Oxygen Isotopes in Nitrite:Â Analysis, Calibration, and Equilibration. Analytical Chemistry, 2007, 79, 2427-2436.	6.5	211
77	Ground Water Stratification and Delivery of Nitrate to an Incised Stream under Varying Flow Conditions. Journal of Environmental Quality, 2007, 36, 664-680.	2.0	67
78	METHODS FOR MEASURING DENITRIFICATION: DIVERSE APPROACHES TO A DIFFICULT PROBLEM. , 2006, 16, 2091-2122.		757
79	Ammonium transport and reaction in contaminated groundwater: Application of isotope tracers and isotope fractionation studies. Water Resources Research, 2006, 42, .	4.2	158
80	Storage and transit time of chemicals in thick unsaturated zones under rangeland and irrigated cropland, High Plains, United States. Water Resources Research, 2006, 42, .	4.2	132
81	DENITRIFICATION ACROSS LANDSCAPES AND WATERSCAPES: A SYNTHESIS. , 2006, 16, 2064-2090.		1,326
82	DENITRIFICATION IN NITRATE-RICH STREAMS: APPLICATION OF N2:Ar AND15N-TRACER METHODS IN INTACT CORES. , 2006, 16, 2191-2207.		72
83	Regional Patterns in the Isotopic Composition of Natural and Anthropogenic Nitrate in Groundwater, High Plains, U.S.A Environmental Science & Technology, 2006, 40, 2965-2970.	10.0	76
84	Perchlorate in Pleistocene and Holocene Groundwater in North-Central New Mexico. Environmental Science & Technology, 2006, 40, 1757-1763.	10.0	69
85	Assessment of Nitrification Potential in Ground Water Using Short Term, Single-Well Injection Experiments. Microbial Ecology, 2006, 51, 22-35.	2.8	50
86	Stable Isotopic Composition of Chlorine and Oxygen in Synthetic and Natural Perchlorate. , 2006, , 93-109.		19
87	Perchlorate Isotope Forensics. Analytical Chemistry, 2005, 77, 7838-7842.	6.5	109
88	Isotopic Compositions of the Elements, 2001. Journal of Physical and Chemical Reference Data, 2005, 34, 57-67.	4.2	212
89	Ground Water Beneath Coastal Bays of the Delmarva Peninsula: Ages and Nutrients. Ground Water, 2004, 42, 1021-1034.	1.3	38
90	Using dual-bacterial denitrification to improvel 15N determinations of nitrates containing mass-independent17O. Rapid Communications in Mass Spectrometry, 2004, 18, 245-250.	1.5	73

#	Article	IF	CITATIONS
91	Assessing denitrification in groundwater using natural gradient tracer tests with15N: In situ measurement of a sequential multistep reaction. Water Resources Research, 2004, 40, .	4.2	45
92	Long term atmospheric deposition as the source of nitrate and other salts in the Atacama Desert, Chile: New evidence from mass-independent oxygen isotopic compositions. Geochimica Et Cosmochimica Acta, 2004, 68, 4023-4038.	3.9	271
93	Contamination of groundwater under cultivated fields in an arid environment, central Arava Valley, Israel. Journal of Hydrology, 2004, 290, 312-328.	5.4	115
94	Geochemistry, radiocarbon ages, and paleorecharge conditions along a transect in the central High Plains aquifer, southwestern Kansas, USA. Applied Geochemistry, 2004, 19, 1655-1686.	3.0	102
95	Reachâ€scale isotope tracer experiment to quantify denitrification and related processes in a nitrateâ€rich stream, midcontinent United States. Limnology and Oceanography, 2004, 49, 821-838.	3.1	126
96	The fate of wastewater-derived nitrate in the subsurface of the Florida Keys: Key Colony Beach, Florida. Estuarine, Coastal and Shelf Science, 2003, 58, 517-539.	2.1	18
97	Oxygen isotopes in nitrate: new reference materials for180:170:160 measurements and observations on nitrate-water equilibration. Rapid Communications in Mass Spectrometry, 2003, 17, 1835-1846.	1.5	371
98	Two new organic reference materials forĺ13C andl̃15N measurements and a new value for theĺ13C of NBS 22 oil. Rapid Communications in Mass Spectrometry, 2003, 17, 2483-2487.	1.5	190
99	Atomic weights of the elements. Review 2000 (IUPAC Technical Report). Pure and Applied Chemistry, 2003, 75, 683-800.	1.9	848
100	Isotope-abundance variations of selected elements (IUPAC Technical Report). Pure and Applied Chemistry, 2002, 74, 1987-2017.	1.9	386
101	Determination of the Total Oxygen Isotopic Composition of Nitrate and the Calibration of a Δ17Ο Nitrate Reference Material. Analytical Chemistry, 2002, 74, 4989-4993.	6.5	122
102	Denitrification in the recharge area and discharge area of a transient agricultural nitrate plume in a glacial outwash sand aquifer, Minnesota. Water Resources Research, 2002, 38, 10-1-10-26.	4.2	228
103	Measurement of the Oxygen Isotopic Composition of Nitrate in Seawater and Freshwater Using the Denitrifier Method. Analytical Chemistry, 2002, 74, 4905-4912.	6.5	1,236
104	A Bacterial Method for the Nitrogen Isotopic Analysis of Nitrate in Seawater and Freshwater. Analytical Chemistry, 2001, 73, 4145-4153.	6.5	1,493
105	Groundwater residence times in Shenandoah National Park, Blue Ridge Mountains, Virginia, USA: a multi-tracer approach. Chemical Geology, 2001, 179, 93-111.	3.3	152
106	Timescales for nitrate contamination of spring waters, northern Florida, USA. Chemical Geology, 2001, 179, 167-186.	3.3	118
107	EFFECTS OF TOPOGRAPHY AND SOIL PROPERTIES ON RECHARGE AT TWO SITES IN AN AGRICULTURAL FIELD. Journal of the American Water Resources Association, 2000, 36, 1401-1416.	2.4	68
108	Strontium isotope geochemistry of groundwaters and streams affected by agriculture, Locust Grove, MD. Applied Geochemistry, 2000, 15, 599-609.	3.0	123

#	Article	IF	CITATIONS
109	Denitrification in marine shales in northeastern Colorado. Water Resources Research, 1999, 35, 1629-1642.	4.2	43
110	Groundwater Record of Halocarbon Transport by the Danube River. Environmental Science & Technology, 1997, 31, 3293-3299.	10.0	24
111	Determination of δ180 and δ15N in Nitrate. Analytical Chemistry, 1997, 69, 4375-4380.	6.5	69
112	Stable isotope evidence for an atmospheric origin of desert nitrate deposits in northern Chile and southern California, U.S.A Chemical Geology, 1997, 136, 135-152.	3.3	204
113	Tritium/3He Dating of River Infiltration: An Example from the Danube in the Szigetkoz Area, Hungary. Ground Water, 1997, 35, 905-911.	1.3	51
114	Denitrification and mixing in a stream—aquifer system: effects on nitrate loading to surface water. Journal of Hydrology, 1996, 186, 105-128.	5.4	120
115	Combined Use of Groundwater Dating, Chemical, and Isotopic Analyses to Resolve the History and Fate of Nitrate Contamination in Two Agricultural Watersheds, Atlantic Coastal Plain, Maryland. Water Resources Research, 1995, 31, 2319-2339.	4.2	575
116	NEW REFERENCE MATERIALS FOR NITROGEN-ISOTOPE-RATIO MEASUREMENTS. Geostandards and Geoanalytical Research, 1993, 17, 159-164.	3.1	59
117	Radium isotope geochemistry of thermal waters, Yellowstone National Park, Wyoming, USA. Geochimica Et Cosmochimica Acta, 1993, 57, 1203-1214.	3.9	50
118	Reporting of nitrogen-isotope abundances (Technical Report). Pure and Applied Chemistry, 1992, 64, 907-908.	1.9	64
119	Laser microprobe analyses of noble gas isotopes and halogens in fluid inclusions: Analyses of microstandards and synthetic inclusions in quartz. Geochimica Et Cosmochimica Acta, 1992, 56, 187-201.	3.9	77
120	Laser microprobe analyses of Cl, Br, I, and K in fluid inclusions: Implications for sources of salinity in some ancient hydrothermal fluids. Geochimica Et Cosmochimica Acta, 1992, 56, 203-225.	3.9	153
121	Brine history indicated by argon, krypton, chlorine, bromine, and iodine analyses of fluid inclusions from the Mississippi Valley type lead-fluorite-barite deposits at Hansonburg, New Mexico. Earth and Planetary Science Letters, 1992, 110, 51-66.	4.4	57
122	Geochemistry of reduced gas related to serpentinization of the Zambales ophiolite, Philippines. Applied Geochemistry, 1990, 5, 625-630.	3.0	171
123	Comparison of metasomatic reactions between a common CO 2 -rich vein fluid and diverse wall rocks; intensive variables, mass transfers, and Au mineralization at Alleghany, California. Economic Geology, 1989, 84, 291-327.	3.8	87
124	Radium-thorium disequilibrium and zeolite-water ion exchange in a Yellowstone hydrothermal environment. Geochimica Et Cosmochimica Acta, 1989, 53, 1025-1034.	3.9	26
125	Methane-hydrogen gas seeps, Zambales Ophiolite, Philippines: Deep or shallow origin?. Chemical Geology, 1988, 71, 211-222.	3.3	279
126	Carbonate-sulfide equilibria and "stratabound―disseminated epigenetic gold mineralization: a proposal based on examples from Alleghany, California, U.S.A Applied Geochemistry, 1988, 3, 499-516.	3.0	30