

# David R M Pattison

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/391321/publications.pdf>

Version: 2024-02-01

62  
papers

3,470  
citations

147726  
31  
h-index

138417  
58  
g-index

63  
all docs

63  
docs citations

63  
times ranked

1799  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Temperatures of Granulite-facies Metamorphism: Constraints from Experimental Phase Equilibria and Thermobarometry Corrected for Retrograde Exchange. <i>Journal of Petrology</i> , 2003, 44, 867-900.  | 1.1 | 335       |
| 2  | Stability of Andalusite and Sillimanite and the $Al_2SiO_5$ Triple Point: Constraints from the Ballachulish Aureole, Scotland. <i>Journal of Geology</i> , 1992, 100, 423-446.   | 0.7 | 300       |
| 3  | Reversed experimental calibration of the garnet-clinopyroxene Fe-Mg exchange thermometer. <i>Contributions To Mineralogy and Petrology</i> , 1989, 101, 87-103.  | 1.2 | 179       |
| 4  | Petrogenetic significance of orthopyroxene-free garnet + clinopyroxene + plagioclase + quartz-bearing metabasites with respect to the amphibolite and granulite facies. <i>Journal of Metamorphic Geology</i> , 2003, 21, 21-34.                           | 1.6 | 162       |
| 5  | Zoning patterns in orthopyroxene and garnet in granulites: implications for geothermometry. <i>Journal of Metamorphic Geology</i> , 1994, 12, 387-410.   | 1.6 | 152       |
| 6  | Reassessment of the garnet-clinopyroxene Fe-Mg exchange thermometer: II. Thermodynamic analysis. <i>Contributions To Mineralogy and Petrology</i> , 1995, 119, 30-42.  | 1.2 | 137       |
| 7  | The Hemlo Gold Deposit, Ontario: An Example of Melting and Mobilization of a Precious Metal-Sulfosalt Assemblage during Amphibolite Facies Metamorphism and Deformation. <i>Economic Geology</i> , 2004, 99, 1063-1084.                                    | 1.8 | 130       |
| 8  | On the Initiation of Metamorphic Sulfide Anatexis. <i>Journal of Petrology</i> , 2006, 48, 511-535.  | 1.1 | 122       |
| 9  | Interplay between equilibrium and kinetics in prograde metamorphism of pelites: an example from the Nelson aureole, British Columbia. <i>Journal of Metamorphic Geology</i> , 2009, 27, 249-279.   | 1.6 | 109       |
| 10 | Petrological consequences of variations in metamorphic reaction affinity. <i>Journal of Metamorphic Geology</i> , 2011, 29, 953-977.   | 1.6 | 108       |
| 11 | Genesis of the Kapuskasing (Ontario) migmatitic mafic granulites by dehydration melting of amphibolite: the importance of quartz to reaction progress. <i>Journal of Metamorphic Geology</i> , 2003, 14, 591-611.  | 1.6 | 100       |
| 12 | Genesis of monazite and Y zoning in garnet from the Black Hills, South Dakota. <i>Lithos</i> , 2006, 88, 233-253.  | 0.6 | 93        |
| 13 | Evolution of structurally contrasting anatectic migmatites in the 3-kbar Ballachulish aureole, Scotland. <i>Journal of Metamorphic Geology</i> , 1988, 6, 475-494.   | 1.6 | 92        |
| 14 | Instability of $Al_2SiO_5$ triple-point assemblages in muscovite+biotite+quartz-bearing metapelites, with implications. <i>American Mineralogist</i> , 2001, 86, 1414-1422.  | 0.9 | 92        |
| 15 | Occurrence and Origin of Andalusite in Peraluminous Felsic Igneous Rocks. <i>Journal of Petrology</i> , 2005, 46, 441-472.   | 1.1 | 89        |
| 16 | Thermodynamic modelling of the reaction muscovite+cordierite+ $Al_2SiO_5$ +biotite+quartz+ $H_2O$ : constraints from natural assemblages and implications for the metapelitic petrogenetic grid. <i>Journal of Metamorphic Geology</i> , 2002, 20, 99-118. | 1.6 | 80        |
| 17 | Felsic magmatic phases and the role of late-stage aplitic dykes in the formation of the world-class Cantung Tungsten skarn deposit, Northwest Territories, Canada. <i>Ore Geology Reviews</i> , 2011, 41, 75-111.  | 1.1 | 78        |
| 18 | Accessory phase petrogenesis in relation to major phase assemblages in pelites from the Nelson contact aureole, southern British Columbia. <i>Journal of Metamorphic Geology</i> , 2007, 25, 401-421.  | 1.6 | 73        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | The implications of overstepping for metamorphic assemblage diagrams (MADs). <i>Chemical Geology</i> , 2017, 457, 38-46.   | 1.4 | 73        |
| 20 | Toward a quantitative model of metamorphic nucleation and growth. <i>Contributions To Mineralogy and Petrology</i> , 2011, 162, 975-993.   | 1.2 | 66        |
| 21 | A comparison of observed and thermodynamically predicted phase equilibria and mineral compositions in mafic granulites. <i>Journal of Metamorphic Geology</i> , 2019, 37, 153-179.   | 1.6 | 66        |
| 22 | Beyond the equilibrium paradigm: How consideration of kinetics enhances metamorphic interpretation. <i>American Mineralogist</i> , 2015, 100, 1659-1667.   | 0.9 | 63        |
| 23 | Melt Extraction during Formation of K-Feldspar + Sillimanite Migmatites, West of Revelstoke, British Columbia. <i>Journal of Petrology</i> , 1995, 36, 351-372.  | 1.1 | 58        |
| 24 | Age of the Ballachulish and Glencoe Igneous Complexes (Scottish Highlands), and paragenesis of zircon, monazite and baddeleyite in the Ballachulish Aureole. <i>Journal of the Geological Society</i> , 2004, 161, 447-462.  | 0.9 | 55        |
| 25 | Infiltration-driven dehydration and anatexis in granulite facies metagabbro, Grenville Province, Ontario, Canada. <i>Journal of Metamorphic Geology</i> , 1991, 9, 315-332.  | 1.6 | 50        |
| 26 | ARSENOPYRITE MELTING DURING METAMORPHISM OF SULFIDE ORE DEPOSITS. <i>Canadian Mineralogist</i> , 2006, 44, 1045-1062.  | 0.3 | 48        |
| 27 | P-T Conditions and the Influence of Graphite on Pelitic Phase Relations in the Ballachulish Aureole, Scotland. <i>Journal of Petrology</i> , 1989, 30, 1219-1244.  | 1.1 | 47        |
| 28 | An automated method for the calculation of $P$ - $T$ paths from garnet zoning, with application to metapelitic schist from the Kootenay Arc, British Columbia, Canada. <i>Journal of Metamorphic Geology</i> , 2013, 31, 525-548.  | 1.6 | 44        |
| 29 | Metamorphic evolution of granulites in the Minto Block, northern Quebec: extraction of peak $P$ - $T$ conditions taking account of late Fe-Mg exchange. <i>Journal of Metamorphic Geology</i> , 1994, 12, 411-428.   | 1.6 | 33        |
| 30 | The geology and evolution of the Ballachulish Igneous Complex and Aureole. <i>Scottish Journal of Geology</i> , 1997, 33, 1-29.  | 0.1 | 33        |
| 31 | The fate of graphite in prograde metamorphism of pelites: An example from the Ballachulish aureole, Scotland. <i>Lithos</i> , 2006, 88, 85-99.   | 0.6 | 33        |
| 32 | Kinetic control of staurolite- $\text{Al}_2\text{SiO}_5$ mineral assemblages: Implications for Barrovian and Buchan metamorphism. <i>Journal of Metamorphic Geology</i> , 2018, 36, 667-690.   | 1.6 | 31        |
| 33 | Contrasting degrees of recrystallization of carbonaceous material in the Nelson aureole, British Columbia and Ballachulish aureole, Scotland, with implications for thermometry based on Raman spectroscopy of carbonaceous material. <i>Journal of Metamorphic Geology</i> , 2019, 37, 71-95. | 1.6 | 29        |
| 34 | Petrology of metapelites in the Bugaboo aureole, British Columbia, Canada. <i>Journal of Metamorphic Geology</i> , 2015, 33, 437-462.  | 1.6 | 27        |
| 35 | An exsolution origin for low-temperature sulfides at the Hemlo gold deposit, Ontario, Canada. <i>Economic Geology</i> , 1997, 92, 569-577.   | 1.8 | 21        |
| 36 | Metamorphic history of the Hemlo gold deposit from $\text{Al}_2\text{SiO}_5$ mineral assemblages, with implications for the timing of mineralization. <i>Canadian Journal of Earth Sciences</i> , 1999, 36, 33-46.   | 0.6 | 19        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Are euhedral microdiamonds formed during ascent and decompression of kimberlite magma? Implications for use of microdiamonds in diamond grade estimation. <i>Applied Geochemistry</i> , 1995, 10, 725-738.   | 1.4 | 18        |
| 38 | Ferrous/ferric (Fe <sup>2+</sup> /Fe <sup>3+</sup> ) partitioning among silicates in metapelites. <i>Contributions To Mineralogy and Petrology</i> , 2021, 176, 1.   | 1.2 | 18        |
| 39 | Geology of the western margin of the Grand Forks complex, southern British Columbia: high-grade Cretaceous metamorphism followed by early Tertiary extension on the Granby fault. <i>Canadian Journal of Earth Sciences</i> , 2007, 44, 199-228.           | 0.6 | 17        |
| 40 | Geothermometry and geobarometry applied to early proterozoic ?S-type? granitoid plutons, Wopmay Orogen, Northwest Territories, Canada. <i>Contributions To Mineralogy and Petrology</i> , 1982, 79, 394-404.   | 1.2 | 14        |
| 41 | Barrovian metamorphism in the central Kootenay Arc, British Columbia: petrology and isograd geometry. <i>Canadian Journal of Earth Sciences</i> , 2013, 50, 769-794.   | 0.6 | 14        |
| 42 | U–Pb geochronological constraints on the timing of episodic regional metamorphism and rapid high-T exhumation of the Grand Forks complex, British Columbia. <i>Lithos</i> , 2013, 156-159, 241-267.  | 0.6 | 14        |
| 43 | Mineral assemblages and phase equilibria of metabasites from the prehnite–pumpellyite to amphibolite facies, with the Flin Flon Greenstone Belt (Manitoba) as a type example. <i>Journal of Metamorphic Geology</i> , 2020, 38, 71-102.                    | 1.6 | 14        |
| 44 | Constraints on temperature–pressure conditions and fluid composition during metamorphism of the Sullivan orebody, Kimberley, British Columbia, from silicate–carbonate equilibria. <i>Canadian Journal of Earth Sciences</i> , 1995, 32, 1937-1949.        | 0.6 | 12        |
| 45 | Thermochronological constraints on the Eocene exhumation of the Grand Forks complex, British Columbia, based on <sup>40</sup> Ar/ <sup>39</sup> Ar and apatite fission track geochronology. <i>Canadian Journal of Earth Sciences</i> , 2013, 50, 576-598. | 0.6 | 11        |
| 46 | Equilibrium and disequilibrium processes across the greenschist–amphibolite transition zone in metabasites. <i>Contributions To Mineralogy and Petrology</i> , 2019, 174, 1.   | 1.2 | 11        |
| 47 | Low-pressure regional amphibolite-facies to granulite-facies metamorphism of the Paleoproterozoic Thompson Nickel Belt, Manitoba. <i>Canadian Journal of Earth Sciences</i> , 2012, 49, 1117-1153.   | 0.6 | 10        |
| 48 | Paleoproterozoic metamorphic and deformation history of the Thompson Nickel Belt, Superior Boundary Zone, Canada, from in situ U–Pb analysis of monazite. <i>Precambrian Research</i> , 2013, 237, 13-35.  | 1.2 | 10        |
| 49 | Stabilization of garnet in metamorphosed altered turbidites near the St. Eugene lead–zinc deposit, southeastern British Columbia: Equilibrium and kinetic controls. <i>Lithos</i> , 2012, 134-135, 221-235.  | 0.6 | 9         |
| 50 | Metamorphic devolatilization of basalts across the greenschist-amphibolite facies transition zone: insights from isograd mapping, petrography and thermodynamic modelling. <i>Lithos</i> , 2019, 342-343, 295-314.   | 0.6 | 9         |
| 51 | Metamorphism and deformation of the Grand Forks complex: implications for the exhumation history of the Shuswap core complex, southern British Columbia. <i>Canadian Journal of Earth Sciences</i> , 2012, 49, 1329-1363.                                  | 0.6 | 8         |
| 52 | A statistical analysis of the distribution of cordierite and biotite in hornfels from the Bugaboo contact aureole: implications for the kinetics of porphyroblast crystallization. <i>Journal of Metamorphic Geology</i> , 2016, 34, 85-101.               | 1.6 | 8         |
| 53 | Spatially overlapping episodes of deformation, metamorphism, and magmatism in the southern Omineca Belt, southeastern British Columbia. <i>Canadian Journal of Earth Sciences</i> , 2018, 55, 84-110.  | 0.6 | 8         |
| 54 | Metamorphism of the Buchan type-area, NE Scotland and its relation to the adjacent Barrovian domain. <i>Journal of the Geological Society</i> , 2022, 179, .   | 0.9 | 8         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | REGIONAL LOW-PRESSURE AMPHIBOLITE-FACIES METAMORPHISM AT THE PIPE II MINE, THOMPSON NICKEL BELT, MANITOBA, AND COMPARISON OF METAMORPHIC ISOGRADS IN METAPELITES AND META-IRON FORMATIONS. <i>Canadian Mineralogist</i> , 2011, 49, 721-747. | 0.3 | 7         |
| 56 | The metamorphosis of metamorphic petrology. , 2017, , .  |     | 6         |
| 57 | Metasomatism in the Generation of Granulite Veins: Mass Balance, Mass Transfer, and Reference Frames. <i>Journal of Petrology</i> , 1993, 34, 1303-1323.   | 1.1 | 5         |
| 58 | Preferred orientations of garnet porphyroblasts reveal previously cryptic templating during nucleation. <i>Scientific Reports</i> , 2021, 11, 6869.  | 1.6 | 4         |
| 59 | Regional metamorphism in the Ballachulish area, SW Highlands, Scotland: new perspectives on a famous old debate, with regional implications. <i>Journal of the Geological Society</i> , 2013, 170, 417-434.                                  | 0.9 | 3         |
| 60 | THE ORIGIN OF MINERALIZED FRACTURES AT THE BLUEBELL MINE SITE, RIONDEL, BRITISH COLUMBIA. <i>Economic Geology</i> , 2011, 106, 1043-1058.  | 1.8 | 2         |
| 61 | Metamorphic and structural evolution of the Flin Flon "Athapapuskow Lake area, west-central Manitoba. <i>Canadian Journal of Earth Sciences</i> , 2020, 57, 1269-1288.   | 0.6 | 2         |
| 62 | Metamorphic styles in young and ancient orogenic belts: introduction. <i>Journal of Metamorphic Geology</i> , 1992, 10, 309-310.   | 1.6 | 0         |